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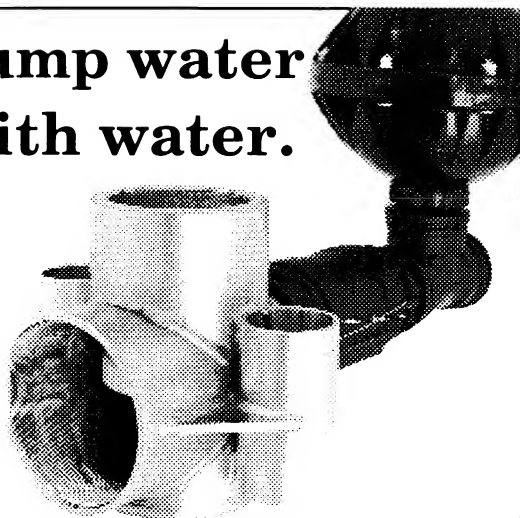
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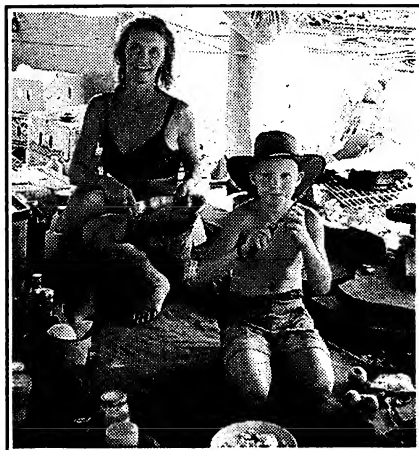
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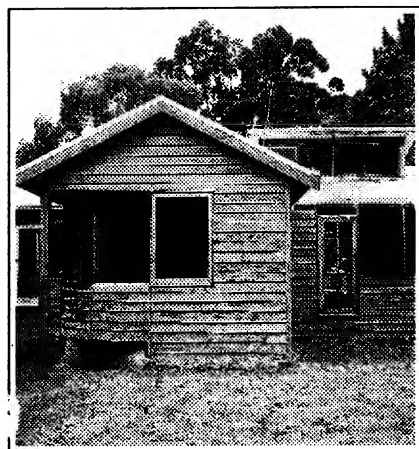
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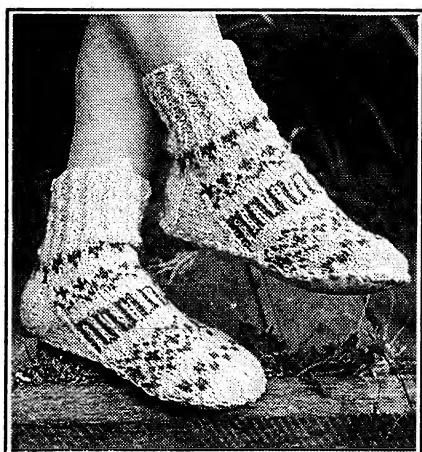
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Back Cover: We share our farm ecosystems with myriad other creatures large and small. Learn how to protect and enhance the biodiversity of your acreage on page 19.

Edited by Megg Miller and Mary Horsfall.

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Are you one of those readers that gets mildly exasperated when browsing Feedback or looking at DIY articles, muttering expletives or comments along the lines of 'Been there, done that, why in the world do people keep trying to reinvent the wheel?'. Many Grass Rooters have rich colourful backgrounds, often stretching as far back as the Depression years or embracing the hardships that accompanied World War II. These people can indeed claim to have been there and done that when it comes to reusing resources and making do. Our efforts today must seem playful by comparison. The beauty is that this experience is not lost forever but benefits other sectors of the readership. A subscriber who wishes to remain anonymous shared impatient thoughts in a letter recently. She thanked us for the cheerful nature of the magazine, 'It does a good job of puncturing my self-satisfied, "been there done that" ego. As an oldie born in the Depression and adolescent during the Second World War, my head is a goldmine of (usually) useless information on life skills and quite often I find it hard to realise that not everyone has been around as long or as far as I have.'

We consider it a privilege to have so many mature-age people reading and contributing to *Grass Roots*. The fact that it's enjoyed by young and old alike helps create the magazine's distinctive feeling of family. It's noticed and commented upon all the time. And like in any family, the younger members often feel their enthusiastic solutions to life's little problems are new and unique to them alone. Some older members, forgetting they too were once . . . will interject with comments prefaced by 'In my day . . .'. We love the diversity created by a readership of differing ages and experience and the acceptance so generously extended. It's easy to put together a cheerful magazine when almost every reader is considerate and helpful.

We put a lot of thought into the article mix in GR and the interesting contributions that can be highlighted on the front cover. Usually there are more

good articles than space to promote them. It seems a recent highlight caused one reader considerable frustration. Jim Chivers enjoys the magazine regularly and became excited when he read 'Polish Recipes' on the June/July cover. 'I expected to find some food recipes and, as I have friends of Polish nationality, was going to pass them on. After much searching I realised you were talking about formulae for floor polish, not recipes for Polish food!' Sorry to have led you astray Jim, the highlight is rather ambiguous. We wonder how many other people looked for Polish food – just hope the wholemeal delights were a tempting substitute.

Our track record for finding long-lost family members or reuniting friends is rather good, so hopefully readers can dust off their sleuthing skills and assist in finding a lost reader. An investigator has been asked by family members in South Africa to locate Robert Schumann. Robert has travelled around Australia in a donkey cart for years and shared his experiences in contributions to *Grass Roots* and other magazines. His love of his animals was well recognised. He is in his mid-eighties and hasn't been in touch with his South African relatives or collected mail for some time. Frank Church of Investigators Australia would like to hear from any readers who can help. Contact him on 08-8212-4629. We do hope this story has a positive outcome.

To lift your spirits, we're acknowledging Biodiversity Month in September with a range of simple activities you can do around your property to encourage the return of wildlife and remnant vegetation. Mary has a great passion for biodiversity and implemented simple but sensible strategies around her country home and property to re-create native ecosystems. Her tips will inspire you, as will articles on helping native birds and a DIY bird box. Set time aside in September for one or two initiatives – we hope you'll be so pleased with your contribution to creating a more diverse habitat, you'll want to take on regular projects that



increase biodiversity.

It was surprising to wake up on the first day of the GST and find the sun shining and people going about life in a regular manner. Lightning and thunder would have been more appropriate portents considering the hype and confusion that preceded it. Like most small businesses, we weren't looking forward to it but as yet it hasn't proved the monster we anticipated. Mind you, our magazine paper has had a 15 percent cost rise and parcel postage rates have increased as well. We haven't had time to take on board changes in other areas yet because of deadlines. No doubt we will feel the full impact in a couple of months when figures have to be balanced and returns sent in. We anticipate a lot more bartering of excess produce and special skills among *Grass Roots* readers.

I thought it would be in keeping with our cheery persona to finish off with a couple of incidents from the office. You all know from previous comments in this column that we enjoy a nibble at morning tea. We all try to spend this break together and enjoy the cheese or chocolate bikkies that are there for sharing and catch up on gossip. Mary brought in a rather filling, heavy cake recently that is sold under the name 'lumberjack' cake. No further description is really needed, except Sue got her outdoor activities mixed up recently, and asked for a piece of 'sledgehammer cake'. Honest, it wasn't that heavy. Not an hour later, Natalie clearly with food at the back of her mind, enquired where the mud pudding article was. I took a minute to realise there was an article in this issue called 'Muddling Along'. Nat's suburban experience of mud has been restricted to mudcake and puddings. Mudbricks? that's another story . . .

A TROPICAL CORNUCOPIA

by Jane 'Many Leaves' Lawrance, Babinda, Qld.

Jane Lawrance describes herself as having a passion for the red dirt and a seed saving obsession. Originally from England, her never-ending delight in discovering new edible wonders of the tropics is contagious. We're sure readers will share Jane's concern with the vital importance of conserving our seed heritage and be enthused and motivated by her story.



Swapping the office shoes for a trusty pair of Blundstone boots totally changed my image! Born and bred an English girl, life revolved around a 9 to 5 city job, hustle and bustle of commuting, with only precious weekends and the odd holiday to escape. Was this our journey in life?

Via jobs (I got an internal transfer), in 1987 we fled from England to New Zealand for a couple of years, where we rented a house and nurtured our strong desire for self-sufficiency. Journeying on to north Queensland, Australia, we found our 119 acres of land near Babinda, 65 kilometres south of Cairns, a far cry from the mid-terrace house in the suburbs of London. 'True pioneering spirit,' I heard my relations cheer; while others thought 'bloody idiots!'

Even when young I had my fingers in the soil, and now look . . . they're still there, and why stop! All that's happened

is I have swapped the cold-loving English plants for the tropical heat-loving varieties (and some mozzies!). Growing and propagating plants has always been a passion, so why restrict it? After all, up here in the tropics, one can grow a cornucopia of nutritious, lush, leafy edible goodies all year round.

Using my gardening skills, I've thrown myself into the Aussie dirt. Wondrous special plants with strange names adorn our dinner plates. A conversation piece at the table might be aibika, New Guinea bean, or granadilla.

PERMACULTURE

What a learning curve life can be. While mingling at the local markets, I met Rene and Lorraine van Raders, who introduced me to the permaculture movement, and a group of people sympathetic with my philosophy on life. I attended one of their two-week Permaculture

Design Certificate Courses in Malanda, and attained my Diploma in Permaculture two years later.

I feel many budding permaculturists make the mistake of planting out their 'ideal' garden before they have fully understood their climate, topography and needs. Earthworks are both unavoidable and expensive. Small cautious trials are essential until you can design your system appropriately. Through these trials we have learnt just that, as we are currently designing our earthworks to change the heavy rains from being a problem to being part of the solution. This is a huge undertaking and will be done gradually in stages. Our long-term plan is to minimise workload (the human resource). Is this possible?

My garden is a composite of varied cautious trials where I have learnt through plant species selection (many

successes and failures), resulting in a core selection of plants that thrive all year round. Look for trusty, reliable seed producers as well as plants easily propagated via root division or cutting. Plucky perennial plants are the winners: aibika (*Abelmoschus manihot*), mushroom plant (*Rungia klossi*), adzuki bean (*Phaseolus angularis*), bananas, pawpaws, Queensland arrowroot (*Canna edulis*), and true arrowroot (*Maranta arundinacea*), to name a few.

Grow plenty of mulch crops within your system: *Crotalaria* spp, citronella and lemon grasses, arhea pea, aibika and comfrey are all great chop and drop species. Our future earthworks will display all my pioneering plants in action as they stabilise any newly disturbed soil. In particular, the ice cream bean (*Inga edulis*), a fast growing legume tree, will feature alongside the arhae pea and rambling pumpkin vines – an ideal no-dig set-up.

With the exception of a couple of months (September and October), disturbance to the soil in any way must be done with care to avoid erosion. A highly successful trial for a 'cyclone resistant plant' in our future design is edible bamboo (*Bambusa oldhamii* and *Nastus elatus*). These are multi-purpose plants – windbreaks, soil stabilisers, poultry forage – and show a great prospective yield.

Within the garden, I have arranged guilds to observe plant relationships. Climbing beans and cucurbits prefer to mingle together on wire fences, thriving as their tendrils entwine each other. Often the pawpaws, arhae peas and guava trees provide a natural trellis, even for my trombone pumpkins dangling way up high! Banana trunks and leaves are a great resource as dynamic accumulators for mulch, starting no-dig garden beds, poultry food; and, of course, produce bananas for all those wondrous wood stove recipes!

Aside from the garden, the true test of a permaculture system is how well it stands up to disconnection from town services. The luxury of services like power, water and sewerage should not be underestimated. As our rural block has no town services, Mother Nature provides our needs with sun, wind and rain. Two 120 watt photovoltaic panels, a 12 volt wind generator (Rutland Windcharger 910), and our hydro unit, a 12 volt Pelton wheel (Rainbow Power



Above: Jane busy at the potting up table.

Below: Tending plants in a predator-proof enclosure.



Company), harness energy, storing it in our 950 amp hour battery bank to provide a modest yet comfortable living.

SEED SAVING

My passion for the red dirt leads on to my seed saving obsession. I feel that seed saving is often overlooked by many permaculturists. This art plays such an integral role in all permaculture systems, creating a self-sustaining cycle of fresh, open-pollinated, hardy

seed to provide a reliable, locally adapted supply for sowing next year, unlike the shop-bought hybrid packets. Excess seeds are a satisfying yield from any garden. Planting a diversity of species, especially in the tropics, produces a wide range for seed collection. These magic capsules differ so much in size, shape, colour and texture, never ceasing to amaze me when they unfold those delicate first plumule leaves that mature into a fully fledged

food plant. It's such a rewarding pastime and desperately needs to be kept alive and kicking, to be passed on to all who heed the message! Have I surely convinced you?

I came across The Seed Savers' Network in the autumn of 1994, and have since made my southerly pilgrimage to attend the last three annual conferences held at Byron Bay (twice) and Melbourne. Every spring I submit my annual seed offerings for members, and, when I can, post off excess seeds to the Network for dissemination. These annual gatherings are ideal for all to meet and learn from each other. I was asked to speak on seed saving in the tropics at Melbourne in 1998 and in Byron Bay last year, combined with a workshop on basic seed saving. It was a fabulous learning experience for me, thanks to Jude and Michel Fanton, of The Seed Savers' Network.

Field trips after the conference always amaze me. I see such a contrast in plants, compared to my tropical selection. I think this underlines the need for people of all climes to preserve their special microclimate of edible plants now in order to maintain the huge diversity that we still have. What is the future of our home-grown seeds? Is it a safe one? Sounds dramatic doesn't it!

So why are we different up north? In a nutshell, we are hot and wet, down south is cold and dry. Although almost seven metres of rain were dumped on my permaculture garden last year, nutritious food was still in abundance. Babinda received the much acclaimed 'Golden Gumboot Award' for the wettest town in Australia and I am saving seeds. How do you do it, I hear you exclaim! We have a wet season (December to March), gradually easing as we reach June/July, with only scattered welcome showers up to about August, after which we move into the short dry season.

Sowing of seeds takes place around June for lettuce, cucumber, nasturtium, tomato, chilli – in order for plants to mature before the heavy, beating rains. Perennial beans seem to cope any time of the year, so do guada bean (snake gourd, *Trichosanthes anguina*), New Guinea bean (*Lagenaria siceraria*), luffa sponge and pumpkin.

Young tender seedlings need to grow, fruit and seed before the wet sea-



Debris is sieved out of pumpkin seed before storage.

son. Lettuce, for example, should go in by June in order to save any seed. I have pulled the entire plants out, roots, maturing seed head and all, hung in a paper bag under cover to finally ripen the seeds, otherwise all would have rotted in the rains.

On dry days in September and October I'm occupied with a bucket as I collect crisp, dry bean pods, delicate dried umbels, matured nonacid cucumbers – all ready for sorting. I have learnt that leaving bean seeds in pods is a mistake – insects move in fast. Crack open pods, sieving out the debris as soon as possible. It's often the case that bean seeds will start to germinate inside their cases due to humidity, so act sharp! Once the seeds are out, they go into a fine-meshed hanging food safe away from marauding cockroaches and ants, until they are dry. A final sorting ensures reliable quality seed ready to store in clean dry jam jars. Label your jar, add silica gel drying crystals and a lighted tea candle, secure lid and place in fridge to promote minimal gas exchange and extend seed life. Creepy crawlies love our humidity and my seeds! Attention to cleanliness is vital.

SHARING

Saving seed is just one part of my lifestyle, along with propagating other tropical plants via tubers and root division. I share my knowledge at the occasional local market, sell a few plants and seeds, but barely cover my petrol and time. Here is a small taste of what I grow up here: the Leguminosae family featuring the winged bean (*Psopocarpus tetragonolobus*), rice bean (*Vigna umbellata*), poor man's bean (other names are hyacinth bean, bonavista, seven year bean, garden lablab, *Dolichos lablab* var *niger*), Madagascar bean (*Phaseolus lunatus*); also starring the granadilla (*Passiflora quadrangularis*), kang kong (*Ipomea aquatica* var *reptans*), Lebanese cress (*Aethionema cordifolium*), salad mallow (*Corchorius olitorius*), and the delectable sweet leaf bush (*Sauropus androgynus*), to name just a few. Up here an array of exciting vegies lurks within my permaculture garden, all having their own special niche in time throughout the year.

I currently have a catalogue featuring my plants and seeds for 6 x 45c stamps. Send all enquiries with an SAE to: Jane 'Many Leaves' Lawrance, PO Box 374, Babinda, Qld 4861.

NO MORE SAGGY HANGERS

by Jose Robinson, Pomona, Qld.

We never seem to have sufficient hangers in our wardrobes to accommodate the clothes we wish to hang. This seems to be a universal problem. The other predicament is, if one tries to hang three pairs of jeans on the one wire hanger . . . sa-a-a-g! And the jeans all collapse in a screwed up manner into the lowest part of the sag. As for plastic, it simply snaps. The strong wooden trouser hangers (if one can find such a thing in this plastic age) are good, but the wire or plastic trouser hangers available in the stores are a dead loss.

Recently, I decided to do something about this ongoing dilemma. First I checked out our backyard softwood timber rack for suitable offcuts which I could cut easily with my small saw. After poking around for a while on the rack, I came up with several promising lengths of pine, or whatever. I also selected the best of a motley lot from my small hoard of discarded broomsticks. (I never throw anything away.)

TO MAKE HANGER

Now for the method of making my 'designer' hanger for several pairs of jeans.

Materials

(for one hanger)

- 1 length of pine or similar 20 mm x 20 mm x 360 mm
- 1 length of broomstick 360 mm
- felt or thickish fabric to sew up a sausage to cover broomstick
- 1 piece of strong wire for hook
- 2 lengths of cover strip or whatever, 40 mm x 12 mm x 140 mm
- 4 screws
- 4 dabs of Aquadhere glue
- a dab of any paint

The lengths of the above timbers are important, but if the thickness is slightly more or less that will be okay.

Method

First sand and paint the four wooden pieces and, when dry, make up as follows.

Attach the two cover strips to the top bar by drilling and screwing the top of each cover strip to the bar. A dab of



Jose's industry and initiative has overcome the saggy hanger syndrome.

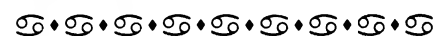
glue helps strengthen it. Now thread the fabric sausage onto the broomstick and drill, glue and screw the bottom of each cover strip to the fabric covered broomstick. You have now made a rectangle.

Measure the top bar to get the centre, then drill a suitable hole right through it on the centre mark. Push the piece of wire through the hole, leaving sufficient on top of the bar to bend into a hook. Leave sufficient at the bottom of the bar to bend the wire at a right angle and tap it firmly with a hammer so it lies close to the wood.

Your nonsag jeans hanger is now ready to cope with as many pairs of jeans as you can fit on it. I guarantee

no more saggy hangers.

I've constructed about fifteen of the above strong hangers for his and hers wardrobes. Of course, we don't have fifteen pairs of jeans, but skirts, slacks, shorts etc can all be hung over the bar and will definitely not slip off, and no hanger sag.



BLISTER-FREE HANDS

To avoid blisters on hands from wooden tool handles, keep the handles clean and well smeared with olive oil and also use olive oil liberally on hands. Olive oil will also neutralise cement burns

A HANDY HOE

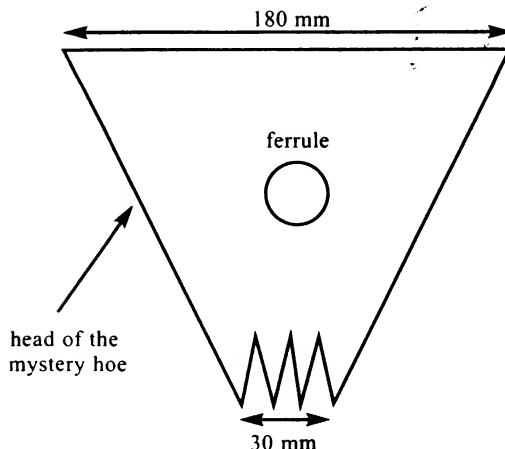
by Mick Arnold, Port Pirie, SA.

A while ago I made a bid for a mattock at a clearing sale. It was part of a parcel of old gardening tools, and when the lot was knocked down to me for ten dollars I was pretty happy to have the mattock so cheaply, and intended to throw out the rest of the 'junk'. However, when I got the lot home, I took a closer look. Amongst the rocks were some diamonds, to say the least. An ordinary hoe proved to be in quite reasonable condition and has since seen considerable service in my vegie garden. The long-handled spade was good, too.

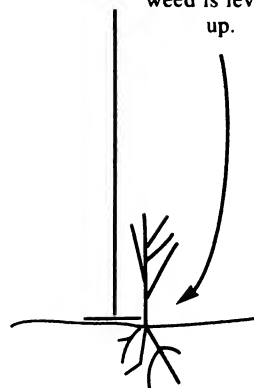
My ten dollars were already starting to look very well spent indeed, when I came across the strangest gardening tool I'd ever seen. At least I think it was meant to be a gardening tool. It is now, and it's the best heavy duty weed remover I've ever had. The head of this 'hoe' is an equilateral triangle about 180 mm on each side. It's made of steel plate three or four millimetres thick. This steel is very resistant to bending and may actually be some kind of tool steel, but anyone who makes a copy of this implement could probably strengthen mild steel by heating it cherry red and quenching it in old sump oil, which should have the effect of hardening the steel somewhat. It used to work for chisels and crowbars for my father anyway.

A ferrule for a handle stands perpendicular to one face, attached at the mid point of the triangle. The original

The Mystery Hoe



Sink teeth into stem of weed, push handle forward, the weed is levered up.



wooden handle was no longer serviceable, so I made one out of medium wall steel tube which I inserted in the ferrule then welded into place. This made the hoe even more effective, due to the extra weight.

One point of the triangle is cut to four teeth (see picture) and this is what makes the hoe so effective. You stroll up to the woody weed, impale the stem of the weed at ground level with the teeth on the corner of the hoe. The weight helps to sink the teeth in. Keeping your grip on the hoe, step forward, and, with the big triangular head spreading the

load over the soil and the handle acting like a big lever, the weed is simply and effectively pulled out of the soil, roots and all. It works well on saltbush and small boxthorns, not to mention the ubiquitous carpet weed or African lucerne as we call it around here.

Stand on the weed to hold it so you can extract the hoe, and you're ready to go again. You soon get to be a good shot with the hoe, which is just as well, because it simply destroys polypipe. C'mon, hands up all you GR folk who haven't hit your polypipe with something.



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ANIMALS IN YOUR LIFESTYLE

by Emer Rawling, 'animal addict and vet nurse', Kurrajong Heights, NSW.

Most people's vision of a *Grass Roots* lifestyle, in dream or actuality, includes animals of some sort, either as pets, stock, or beasts of burden. In fact, any self-sustainable agriculture system will need input from animals at some stage, for your food, to provide manure for fertility, for fibre or fuel. But are you really ready and equipped to cope with animals in your lifestyle?

Moving back to the land after perhaps a generation or two in suburbia with little more than a cat for company, it is tempting to indulge all those fantasies of chooks, a cow, a few sheep, a pony for the kids, especially with all that space on your new acreage! Little do most people realise the time, cost and demands on the land that such a menagerie can create, so become informed before you jump in.

The major problem with animals is that it is easy to unwittingly go wrong, because even with the best intentions inexperience is a real disadvantage here. If you omit something with a plant crop and it fails, you suffer little less than a bruised ego, but with any

*Whatever joy you find in animals,
give it back to nature,
Gavin Maxwell,
Ring of Bright Water.*

animals the reality is that they literally suffer your mistakes. Their pain will teach you volumes, but will also break your heart if you're responsible.

The main skill in animal husbandry, from chooks, to cattle, to exotic animals, is *observation*. Learn what is normal for the type of animal and for your individual animal. Teach yourself to really *see* every day, not just *look*, and keep track of variations. Never be afraid to ask advice – animals never laugh at your ignorance, only suffer it. Most animals are healthy, but be aware of what could go wrong and learn preventative care, because *good husbandry is 90 percent of animal health*.

Chose carefully, knowing what particular animal you want and why. It's not enough to fancy peacocks because you saw them somewhere when you were a kid, only to find out they are noisy and terrorise your chooks! Be realistic about the time you have and choose animals that fit your situation, not everyone can have horses or alpacas, but there is bound to be something just right for you! Never buy them on whim, or without full family discussion, because they will become everyone's responsibility. Buying animals to teach the kids is great, but what happens when they grow up?

Choose a breed variety that suits your climate and situation (when in doubt go for hybrid vigour). Be realistic about the numbers you can handle, keeping in mind that many are herd animals which are only happy in groups. Many people say you should never keep one of anything, or at least have mixed company (horses and goats get on well for instance). Another reason to be realistic about numbers is that very many small holdings are overstocked which leads to soil damage, water shortages, and feed bills!

The main disadvantage of having

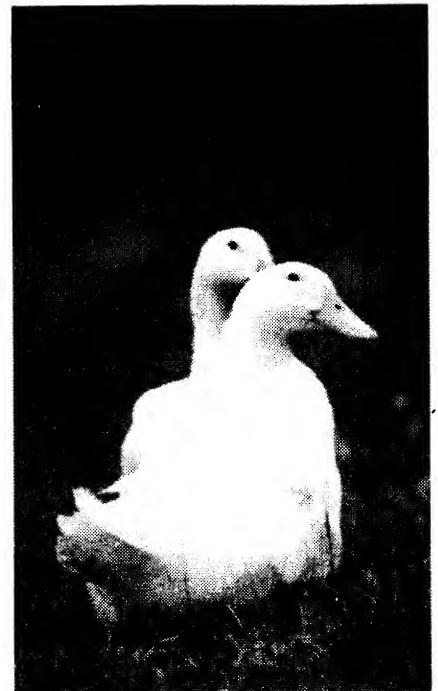
animals is that they tie you very securely to your land, 365 days a year. A dog or cat can be put in boarding, or fed by a friend, but who will feed chooks and ducks, milk the goat, and check horses every day when you take that well-earned holiday? Some animals even need constant 24 hour supervision at breeding times and they can be very demanding, even when you're sick or hungover!

Generally, the larger the animal, the longer it will live. A dog may live ten years, a cow 15 to 20, a horse 30 and a donkey 50 years. Will you be around in 20 years to give that horse his well-earned retirement, or will he end up, like so many, as knacker meat when no one wants an old animal and you've moved on.

Any animal involves nasty messy stuff, from manure to mating. Nature is not always pretty and certainly not always straightforward, as huge vet bills will testify! Milking animals are always going to necessitate culling of male offspring. Will you have the strength to kill them or sell them to that fate? Or will



Overstocking can lead to soil damage and feed bills.



Who will feed these appealing creatures when you are on holiday?

you end up with a huge herd of expensive pets on too little land?

Most people drastically overestimate the number of animals they can fit on a piece of land. Animals need room to move (which with cattle and horses can be enormous), room to graze and rotate paddocks, room to grow extra feed, and room and facilities to keep them when they're ill or birthing. Even large acreage may not support many grazing animals sustainably. In good years you can become complacent and breed up, but what about that drought, or hay shortage, or cash shortage which doesn't allow you to buy in expensive extra feed? Always plan for sustainable grazing, which in the case of horses can mean up to five acres per animal, depending on soils and other variables. It is wise to check local stocking rates with your more experienced neighbours.

Whatever type of animal you're considering, research them thoroughly, not just from books and this wonderfully informative magazine, but look and ask around about what others in your area own. There's usually a reason a breed is popular in a region, and you can pick up local tips, because, for example, sheep husbandry in Queensland differs tremendously from techniques in Tasmania.

Realistically assess your land and prepare your facilities first. It's too late to make fences sheep proof when they've already bolted, or build a chicken shed when the fox has already eaten them! Then go looking for your new family members, as they will surely become, preferably with expert help, and choose for health as well as those eyes that say 'take me'!

If, after careful consideration, you decide animals don't fit into your lifestyle, take heart; you can still enjoy and nurture your local wildlife with a habitat garden. Anyone can access the wonderful magic our fellow creatures have to teach, and learn the meaning of the special stewardship we owe to the earth's other animals.

MAKE YOUR OWN WHITE OIL

Pour a cup of cooking oil into the blender and add one and a half cups of water. This will blend to a cream and can be diluted with 50 parts water prior to spraying.

WHAT'S ON

Opportunities for practical learning abound. Learn a new skill, hone existing ones, or enjoy planning to be more self-sufficient.

HOBBY FARM EXPO 2000

This West Australian farming expo will be held on Sunday, 17 September from 9am to 4.30pm at a small working farm in Landsdale. Landsdale Farm will have plenty of livestock on display, demonstrations, features, and representation from useful officials, all designed to assist those wanting information and advice about all aspects of small property ownership. Contact Steve on 0419-863-391 for more details.

FARMING WITH CLYDESDALES

A Victorian farm has been using Clydesdale horses to work the land for the last twelve years and is offering an introductory course for those who want to learn about the old ways of working with Clydesdales. The seminar will be held on Sunday, 20 August at Paramoor Farm, Carlsruhe via Woodend, and covers understanding and caring for the animal, harness and machinery requirements, working the farm and crops used. Contact John Lear on 03-5427-1057 for more details.

HANDMADE HOUSES TOUR 2000

The fifth annual handmade houses tour will be held on 23 and 24 September around the Bellingen area. This popular event is the major fundraiser for Tallwood Community School and for just \$30 per car visitors can take a self-drive tour around the Nambucca Valley to inspect twenty inspirational houses that have been built in a range of building styles. Owner builders will present discussions and on Saturday night there will be a party/information evening with guest speakers and information sharing. For more details, please contact Faye Welsh on 02-6564-4003.

SEED SAVERS' GATHERING

A Seed Savers' Gathering will be held at Collingwood Childrens' Farm on Sunday 8 October. Speakers will discuss community gardens, Asian herbs and vegies, and seeds and sustainable aid. Bring your seeds, plants etc for swap-

ping or selling. Workshops include basic seed saving, growing food forests and involving children in gardening. Contact Permaculture Melbourne on 03-9813-4287 for a registration form.

WORLD WIDE WOOL COMPETITIONS

Contributions are being invited for two wool art competitions offering great prizes; one is for schools and the other is for artists. Schools participating in The Global Classroom Project receive 500 grams of Merino wool to make their artwork. They will link with Euroa Primary School on the internet and exchange stories about their local wool industries and the relevance of wool in society. 'Perfection in Wool' is an international open entry competition and knitters, felters, crocheters, weavers, embroiderers, braiders, spinners, or rug, tapestry and macrame makers are all invited to participate. Contact Cathy Bezak for full details about these competitions on 03-5795-3082 or visit the World Wide Wool website on www.geocities.com/world_wide_wool

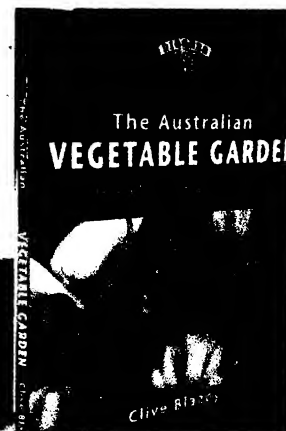
MONEY SPINNERS SEMINARS

The Money Spinners seminars have been designed to show the many ways woollen fibre can be transformed and processed into a viable product for sale. The seminars allow participants to assess their individual situation and choose one or more steps to suit their own resources, lifestyle and preferences. Seminars are being held in Cooma on the weekend of 2 and 3 September and in Geelong on Wednesday 6 and Thursday 7 September. Contact Ashford Australia on 1800-026-397 to enrol, or for more details about the seminars.

MANGROVE MOUNTAIN COUNTRY FAIR

This year's fair is on Saturday, 21 October at the Mangrove Mountain Hall and grounds on Wisemans Ferry Road. It features stalls, displays, rides and prize-winning exhibits, including photography, farm produce, cakes, patchwork, needlework, woodwork, art, flowers and more. Call 02-4376-1350 or 02-4377-1566 for more details.

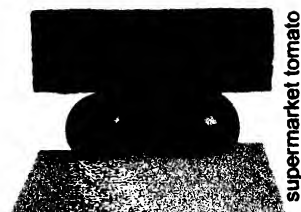
TASTE THE JOY OF GROWING YOUR OWN



Introducing the most comprehensive book on growing vegetables naturally in Australia – 'The Australian Vegetable Garden'. Written by Clive Blazey, founder of 'The Digger's Club', this book is a complete guide to growing your own vegetables all year round.

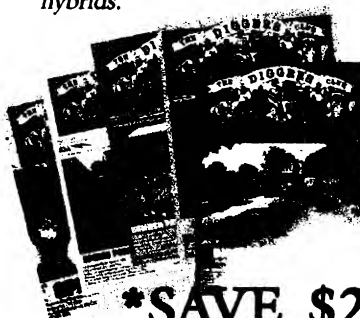
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LIVING WITH CFS

by Margaret Withnall, Mt Hunter, NSW.

When a friend dropped in unexpectedly and found me sweeping dirt through a knothole in our timber floor, we laughed hysterically. I have suffered from CFS for nearly eight years now and any tiny thing that helps save energy and still gets the job done is worth doing as far as I am concerned. The muscle fatigue, pain and lack of energy to do even small tasks can sometimes be overwhelming; at the least it is just frustrating, so it is essential to find workable shortcuts and energy-saving procedures.

It is most depressing to wake early feeling well, plan the day in your head, and then not be able to get out of bed. When you suffer with CFS, it is not one day at a time, but one hour at a time. Because of allergies we had the carpet removed and I really must say the knotholes in the old flooring are quite handy.

Dressing can be a major problem, particularly with buttons. My husband and I both put shirts on and take them off with as many buttons done up as possible. I have to confess they even get washed and yes, you guessed it, ironed that way as well.

All the household chores are minimised or reorganised. The dishwasher frequently spews out some smelly UFO (unidentified featureless object). If it isn't dishwasher safe, it just doesn't survive in our house. There are also numerous UFOs (unidentified frozen objects) in the freezer, because at the



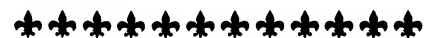
All household chores are minimised.

end of the day I plead for takeaway and the planned meal sinks into frozen oblivion. Dusting and vacuuming are done only when guests are expected, but I leave my eight-legged friends in their webbed ceiling corners, mostly because I can't stretch my arms that high, but I tell people they are part of my 'environmentally friendly insect eradication system'.

Supermarket trips are now planned carefully. I used to attempt a fortnight's shopping, wheeling myself on the back of the shopping cart, only to get to the checkout looking and feeling like a rag doll. I would take one look at the checkout line and make a bolt, slowly of course, for my car and home, shopping-less. I now make a ten-minute list, shop very early and avoid the laundry aisle like the plague. Of course, Hubby and I are a lot thinner now, there's not a whole lot you can buy in just ten minutes.

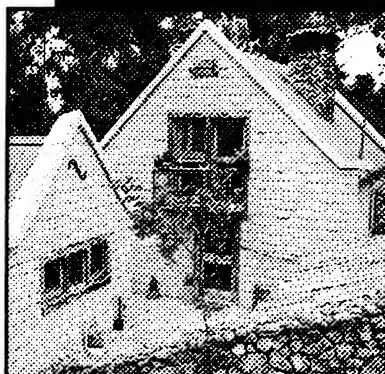
I still indulge my favourite hobby of training and showing Australian Ponies, but instead of riding I exercise them by sitting in the middle of the round yard with a very long whip and getting them to trot around me. To make the energy saving complete, all I need is a swivel stool.

We rarely go out to dinner or anyplace where I might be exposed to car fumes, perfumes, or other chemicals. Of course, I could probably go anywhere I chose if I wore my oxygen mask, but we can't find a mask big enough for my ego. So we live with CFS, taking each hour as it comes, laughing at the funny things I do and appreciating the many friends, medicos and others who have helped make a difference.



HEART DISEASE AND ORANGE JUICE

Canadian researchers have found that consuming three glasses of orange juice a day can help to improve cholesterol levels. Good HDL cholesterol can be increased by 21 percent and the ratio of good to bad cholesterol is improved by 16 percent. Benefits even continue for some weeks after consumption is halted. These benefits are attributed to the phytochemical hesperidin; and don't forget orange juice also contains the best source of the B vitamin folate.



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ALTERNATIVE EDUCATION

by Juliana Doupe, Whitfield, Qld.

If living away from it all (on the land or on the sea) sounds appealing, you can do it, and the kids can still get schooling through the distance education system. Distance education started about 75 years ago. It was originally known as School of the Air because teachers would use the Royal Flying Doctor bases and equipment to transmit lessons. Eventually, schools received their own buildings and today there are around 30 spread throughout Australia, and two in New Zealand.

HOW IT WORKS

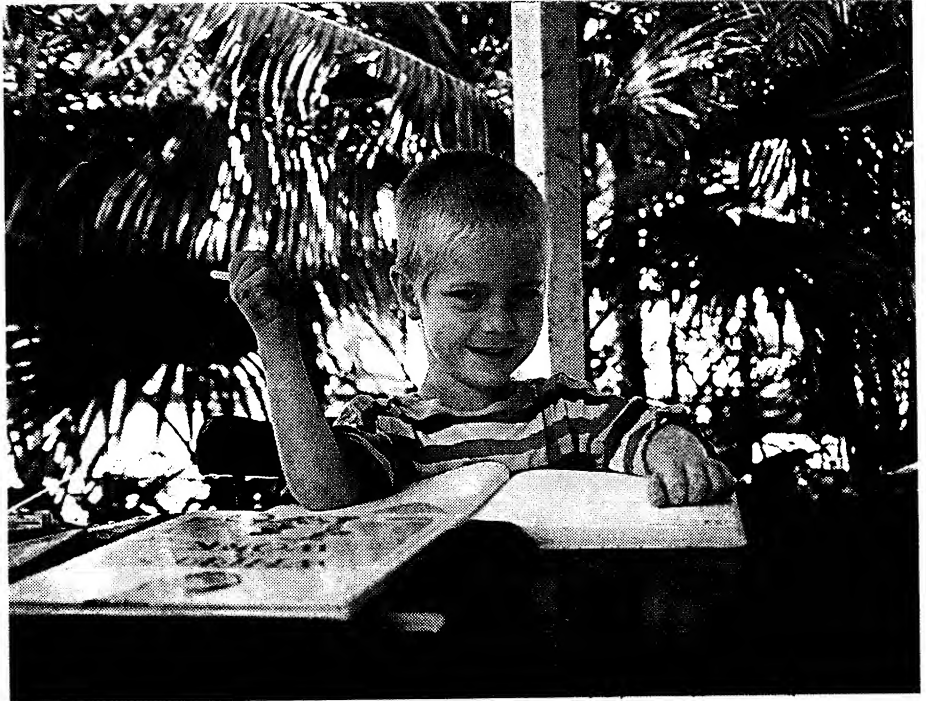
Distance education uses a variety of methods to teach its students, including radio, telephone and correspondence. Radio lessons are broadcast on high frequency radio, with the children participating in the class by using provided transceivers. Curriculum material is usually sent out four times a year, though this may vary. When a unit has been completed the materials used should be returned. Students are encouraged to ring and talk to their teacher regularly, as are their home tutors (usually a parent). Some schools conduct lessons over the telephone instead of using the radio.

Getting Together

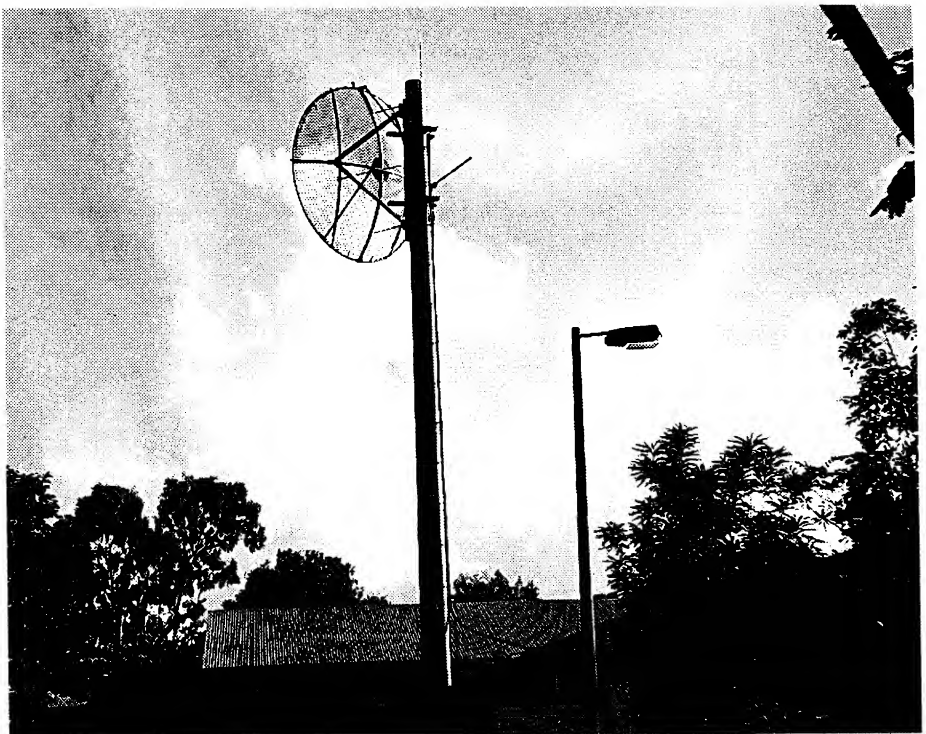
Each year there are school camps with appropriate age groupings, cluster days for preschoolers, and activity days for families and staff to socialise together. There are also mini schools where children, home tutors and teachers meet and learn together.

Support

There is support for home tutors through an on-air talkback session, as well as using the phone whenever needed. Home visits also play a part in distance education. Visits are made to families by support staff, class teachers and field support teachers. They will work with the student and the home tutor, giving support and encouragement. There is also a week-long home tutor inservice, available to all home tutors and held at the same time as the annual school camp.



An isolated lifestyle and children's education can successfully co-exist via distance education.



Radio lessons are broadcast on high frequency radio with children using transceivers.

Ages

Distance education is available for years 1 to 12, as well as providing a preschool programme. Some adults also study through it in order to obtain their senior grades. Not all distance education schools provide years 11 and 12.

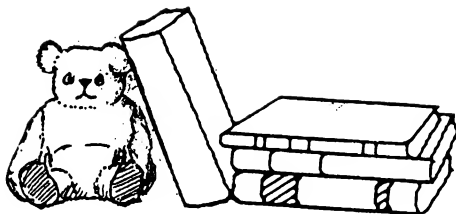
Curriculum

The curriculum for distance education students is based on the equivalent state school model. The core subjects are English, Maths, Science and Social Science. There are many electives, including Japanese, Music, Physical Education, Computer Technology and Art.

Attendance Criteria

Generally, a student should be more than 20 kilometres from the nearest school, or have longer than a three-hour return journey using school transport. If a child has difficulty fitting in with mainstream education, medically or for some other reason, they may be considered for eligibility.

When a child lives close to (and is able to attend) a state school and parents prefer distance education for them, they must apply to the Minister



for Education in their state or territory. If the application is successful, the family will follow the same process as an isolated one. There is a fee of \$1000 a year for such a service.

For Travellers

For people who are travelling, the system stays the same. School work is sent to a current address and when it's returned to your base school you include your destination address, usually a post office. This process is repeated for the duration of your journey. Distance education is not just available to travellers within Australia. Families who are transferred overseas have access to it, as well as families living on boats, nationally and internationally. To be eligible you must be an Australian resident and intend to be on the move for more than 16 weeks.

Contacts

NSW

Distance Education Primary School,
Cambridge St,
Stanmore,
NSW 2048.
Ph: 02-9568-9888.

Secondary Distance Education Centre,
Hardy St,
Dover Heights,
NSW 2030.

Ph: 02-9581-0240.

Victoria

Distance Education Centre,
Albert St,
Melbourne,
Vic 3000.
Ph: 03-9626-9444.

Queensland

Distance Education School of Brisbane,
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West End,
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Hazrat Inayat Khan

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HELP AUSTRALIAN BIRDS

by Birds Australia.

With 100 of Australia's 800 native bird species under threat and the very real possibility that that figure could double in the first century of the new millennium, we should all be mindful of the impact we have on our environment. Important bird habitat does not just exist in wilderness and bush; however, our own backyards can provide valuable breeding and feeding grounds for some of our precious native birds.

Birds Australia, the country's native bird conservation group has compiled a list of twenty things *you* can do to secure the future of our native birds.

- Plant natives from local seed in your garden. Ask your local nursery to stock local native seed or propagate your own and give extras to the neighbours.

- If your garden contains medium to large trees without hollows, erect nesting boxes designed for the species you wish to encourage and evict unwelcome visitors such as common starlings, common mynas and feral honeybees.

- Plant prickly natives in clumps so small birds can nest safely away from cats and dogs.

- Feed regular avian visitors on an ad-hoc basis so native birds do not become too dependent on the food supply.

- Lobby your local council to plant more bird-friendly trees and shrubs in your street and encourage them to leave multi-storey habitat intact, in addition to manicured parklands.

- If you live on the land, work towards the development of a bird-friendly farm by maintaining and enlarging areas of remnant vegetation to between 10 and 30 percent of the property.

- Where dams exist, create a bird-friendly environment with a shallow reedy area as well as a deep area to encourage a mix of wading and diving birds. An island will provide refuge from predators and breeding areas for a range of birds.

- Purchase a field guide for your home or give one to a friend. You will soon enjoy identifying regular garden



Double-barred finch has a varied habitat including open forest, grassland and creekside vegetation.

visitors and birds you see when bushwalking or on holidays. *The Field Guide to the Birds of Australia*, by Graham Pizzey, RRP \$35; *The Slater Field Guide to Australian Birds*, by Peter Slater et al, RRP \$35; or *Simpson and Day's Field Guide to Australian Birds* CD Rom, RRP \$49.45. Phone Birds Australia on 03-9882-2622, or check your local bookstore.

- Save hair and beard trimmings to spread on the lawn for birds, they make great nesting materials and are gratefully received by local native birds.

- Encourage recycling in your home and workplace. Involve the kids at home by introducing fun activities such as paper making and impress the boss at work with a reduced stationery bill at the end of the month.

- Be a responsible cat owner. In Victoria alone, over 200 million wildlife – many of them native birds – are killed each year by our pet, stray and feral cats. Keep your cat inside at night and when outside teach it to walk on a lead – they do get used to it!

- When you come across sizeable roadkill, move it well away from the road so birds of prey can feed on it safely (taking care not to become road

kill yourself!).

- Don't tidy up your yard too much! Birds need undergrowth for protection, shelter and feeding.

- Get your workplace involved in sponsoring a threatened species or project through Birds Australia and enjoy following its progress together. Phone Birds Australia for details.

- Help change long-standing attitudes that native vegetation is unattractive; give gifts of books featuring native landscapes, potted plants or seedlings and native floral arrangements.

- It is estimated that billions of birds may be killed each year in window strikes around the world. If birds continually crash into particular windows or sliding doors, try planting, screening vegetation, installing an awning or allowing the window to build up an external film of dust.

- Cut through the rings around plastic drink and food containers and six-pack holders as birds – and marine animals – often choke on them. When you find fishing line on the beach burn it and turn it into a solid blob.

- Provide a year-round water supply in your garden, but place the birdbath away from windows and out of reach of



Tawny frogmouth frequents woodland habitat, building surprisingly small nests on top of horizontal forks. (Photo: Max Borella)

domestic pets.

- Replace your red gum firewood with plantation-grown timber, or install natural gas heating. In Australia, as much firewood is used each year as is consumed by woodchipping.

- Join Birds Australia to support research and conservation of Australian native birds and their habitats, to enjoy the benefits of membership including quarterly magazine *Wingspan*, to be eligible for free entry to reserves and observatories, and to become involved in activities Australia wide. Phone 03-9882-2622 or join on the web at www.birdsaustralia.com.au.

Birds Australia (formerly the Royal Australasian Ornithologists Union) was established in 1901 and its aim is to conserve Australian native birds and their habitats. Birds Australia is the country's oldest national conservation organisation and the nation's largest

scientific body concerned with Australian wildlife.

On average, Birds Australia is involved in 30 conservation-related projects each year. The organisation works extensively with landowners and managers, corporations, conservation agencies and governments to find resolutions that enable wildlife to survive and industry to prosper on a sustainable basis. Volunteer input to these projects involves many thousands of Australians, a contribution that is worth over \$10 million per annum.

Birds Australia's Bird Habitat Acquisition Fund is aiming to raise \$1 million to purchase Newhaven Station in the Northern Territory. This 262,600 ha property is home to numerous birds and mammals, including threatened species as it has been conservatively managed in the past and much of the original habitat is intact. Ph: 03-9882-2622 for more information or to make a donation.

RESPONSIBILITIES OF WOOD BURNING

While wood heaters provide warmth and comfort to many each winter, the smoke emitted is known to result in pollution, which causes respiratory problems; unburnt fuel ends up in the atmosphere and valuable resources are wasted. Here are a few tips to improve air quality, while reducing maintenance and running costs for wood heaters.

- Burn only dry, seasoned, untreated wood. Half the weight of freshly cut wood is made up of water, which means the fire does not get as hot as it should and it smokes excessively, while energy is wasted trying to boil the water.

- Store wood under cover in a dry, ventilated area. Stack it away from the walls of the house as the wood can act as a pathway for insects (ants or termites) in some states.

- Use small logs. It is best to use two or three small logs rather than one big one. Large logs are better for slow burning.

- Burn the fire brightly. Use dry kindling to light the fire quickly so as to heat the flue and get the draught going. Run the heater on a high burn rate (air controls fully open) for five minutes before and 15 – 20 minutes after adding more logs. Make sure the flue is cleaned of creosote each year as excessive build-up can cause flue fires.

- Have a flame if burning overnight. Run the heater at full burn rate for 15 – 20 minutes before turning down at night. Air controls should be high enough to prevent the flame from disappearing, especially for wood heaters that do not carry the Australian Standard AS4013 certification.

Source: *North East and Goulburn Murray Farmer*, May 2000.



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SMALL FARM BIODIVERSITY

by Mary Horsfall, Longwood East, Vic.

With loss of biodiversity having been identified as Australia's most pressing environmental problem, there is a sense of urgency in environmental/conservation circles to redress the situation before it deteriorates too much further. Biodiversity loss does not involve just the obvious and the headline-grabbing, such as the disgraceful situation of massive land clearing in northern Queensland, the loss of koala habitat, or declining bird populations. By far the most concerning aspect is the potential for decline of the very ecosystem services that support ourselves and all other life on the planet: the soil fauna (both micro and macro) that is responsible for nutrient cycling and soil replacement, systems of air and water purification, insect populations that pollinate our crops and control pests, systems that break down our wastes and detoxify pollutants.

Until recently it was believed that photosynthesis was the most important of the ecosystem services. More recent studies, according to David Suzuki and Holly Dressel in *Naked Ape To Superspecies*, suggest that, ironically enough, all life depends on the process of decay. The immensely complicated process of decomposition, involving interactions between myriad species, enables the breakdown of organic matter and the return of nutrients to the ecosystem to fuel further growth.

Some scientists predict that at the present rate of species extinctions between 40 and 50 percent of all the earth's biodiversity will be extinct within the foreseeable future. Remember, this is not just the cute and cuddly; this is everything! If true, this is not a world many of us would want to live in.

At all levels of government there are strategies and plans in place aimed at combatting the problem of biodiversity loss. Sadly, often because of lack of appropriate legislative support, the high-sounding plans are not always translated into positive action – witness the impasse between state and federal governments in Queensland allowing the continuing destruction of vast areas

of indigenous vegetation; 300,000 hectares per year at last estimate.

Before all this makes you feel too despondent, I am optimistic that we have it in our power to bring about small but jointly significant changes for the better. In particular, those of us having responsibility for the custodianship of small acreages can manage them in a way that conserves and increases biodiversity. The more land is held, the greater the potential benefit of our actions.

Those having existing areas of remnant indigenous vegetation, be they rainforest, sclerophyll woodlands, native grasslands, or even wetlands, have a responsibility to conserve them. It is by far preferable, from an environmental point of view, to conserve what is there than to try to re-create native ecosystems. It can take upwards of a hundred years to even approximate the original habitat, and the intricacies of interdependent relationships are probably impossible to emulate. Much of

Australia's wildlife, including many bird species, needs nesting hollows in large trees in order to reproduce successfully. The development of even small hollows adequate for tiny feather-tail glider possums can take about a hundred years. Larger birds and mammals, of course, need larger hollows. It can take two hundred years for a tree to develop a hollow adequate for a rosella, and even longer than this for owls, black cockatoos and some duck species.

Where remnants are degraded, they can be replanted, using, as far as possible, the indigenous vegetation. It is important, in a forest or woodland situation, to mimic the natural 'layers' of growth – the understorey, a mid-level of shrubs and small trees, and the upper canopy. Simply fencing off a degraded bushland area and controlling weeds is sometimes enough to allow natural regeneration to occur. Severely degraded areas, however, will need more active intervention.



This spectacular flowering gum attracts hordes of birds and beneficial insects, even though it is not indigenous to the area.

Standing dead trees should also be left, where possible. As well as providing nesting hollows they are also wonderful roosting sites, depending on their location, for water birds such as ibis. Encouraging these birds to your farm by providing roosting trees and a dam or other wetland area will provide you with a valuable natural pest control. An ibis, for example, will eat about 200 grams of insects per day, including grasshoppers, plague locusts, crickets, beetle larvae and moth caterpillars.

It is of vital importance, given the previous comment about decomposition, to leave the leaf litter and fallen logs in place. Not only is this the building block of new soil and the source of future nutrients for the plants, it is an essential link in the food and habitat chain for myriad creatures.

If there is no, or very little, remnant vegetation, a replanting program is called for. Landcare groups, DNRE officers, the local shire, local indigenous nurseries and environment groups are all sources of information about what would have grown in your area, how to obtain these plants and how to create a native ecosystem. Often there are grants available for fencing and for the purchase of trees. These can usually be accessed through Landcare or Bushcare groups.

When deciding on where to site your revegetation area, look further than your own property. Notice how a plantation can join up with others on surrounding properties or on roadside verges. Bigger areas with irregular dimensions are better habitat areas than smaller narrow ones. It is ideal if your property can become part of a biolink that weaves throughout a large surrounding area.

Many studies now have shown that up to 30 percent of a farm can be revegetated without loss of productivity. Indeed, many flow-over benefits of a replanting or conservation program can assist the farming family as well as the ecosystem. The plants as they develop will provide food and habitat for a range of birds, insects and reptiles that will reduce pest populations; they can act as windbreaks and modify the microclimate, being of benefit to crops and stock as well as making life more pleasant for the human population; they lower the water table and help redress salinity; their leaf drop is instrumental in soil formation and nutrient cycling; many of the



insects and birds they support are essential to the pollination of our food crops.

Depending on the choice of species, trees can also be of more direct economic benefit through selective logging for timber or firewood, as fodder plants for stock, or even as food crops. The burgeoning bushtucker industry can provide examples of productive trees that can easily be incorporated into a multipurpose, multispecies plantation.

Locally indigenous species are the ideal ones to plant for conservation of the Australian landscape and native biodiversity, and many purists will argue for their exclusive use. However, I suggest that there are many instances where either native-but-not-indigenous plants or 'exotics' can be incorporated in farm plantings. One such example would be in the case of fodder or food plants. Though some native fauna are dependent on a narrow range of flora for food and habitat, many others are quite adaptable and will utilise nonindigenous species, even garden plants, very successfully. Whatever you choose, go for a wide variety of species consistent with what will thrive in your local area and will not develop into an environmental weed and you can't go far wrong.

It's worth finding out, before choosing species to plant, if there are any locally threatened species of flora or fauna in your region and how you can assist in their recovery. Find out also if there are environmental weeds in your area that you should avoid planting. These might not necessarily be introduced species, but could be native species planted outside their normal range that are vigorous enough to overtake the indigenous species and reduce the area's biodiversity.

The home garden can be designed to blend seamlessly with windbreaks, plantations, wildlife corridors, or other conservation areas. Many birds, insects, frogs, reptiles and native mammals will frequent such a garden. Ponds and bird-baths, rocks and logs, and fringe garden areas left a bit overgrown will encourage biodiversity. Native honeyeaters will enjoy the nectar of many garden plants,

not just indigenous or other native species. Insects will source pollen and nectar, and the predators will keep garden pests under control. Lizards and frogs will control slugs and snails as well as a range of pest insects. Do take care not to plant species with the potential to become environmental weeds.

In most rural areas people will be very aware of the need for bushfire prevention strategies. How does this reconcile with the need to leave fallen leaves, twigs and logs – all potential fire hazards – for biodiversity conservation? There is obviously a need for some pragmatic compromise. I suggest that areas immediately adjacent to and surrounding homes and farm buildings be kept clear, either by lawns or closely grazed paddocks, or by paving of some sort. Well watered gardens are also quite safe to have near homes. As you move out from the house, or other structures, gradually decrease the 'tidiness', increase the understorey, and leave the litter, until the house garden has blended into the conservation zone. It can help to think in terms of 'zones', similar to the permaculture concept. The zone immediately surrounding buildings is the zone of maximum fire safety. This might blend into a zone of native trees but with little or no understorey and fallen twigs and branches collected for fuel use in winter. Beyond this is the conservation area proper where understorey and litter are vital components. Remember, we humans are part of the ecosystem as well and must use our ingenuity to ensure that our own needs are met as well as those of the other species we share 'our' ecosystem with.

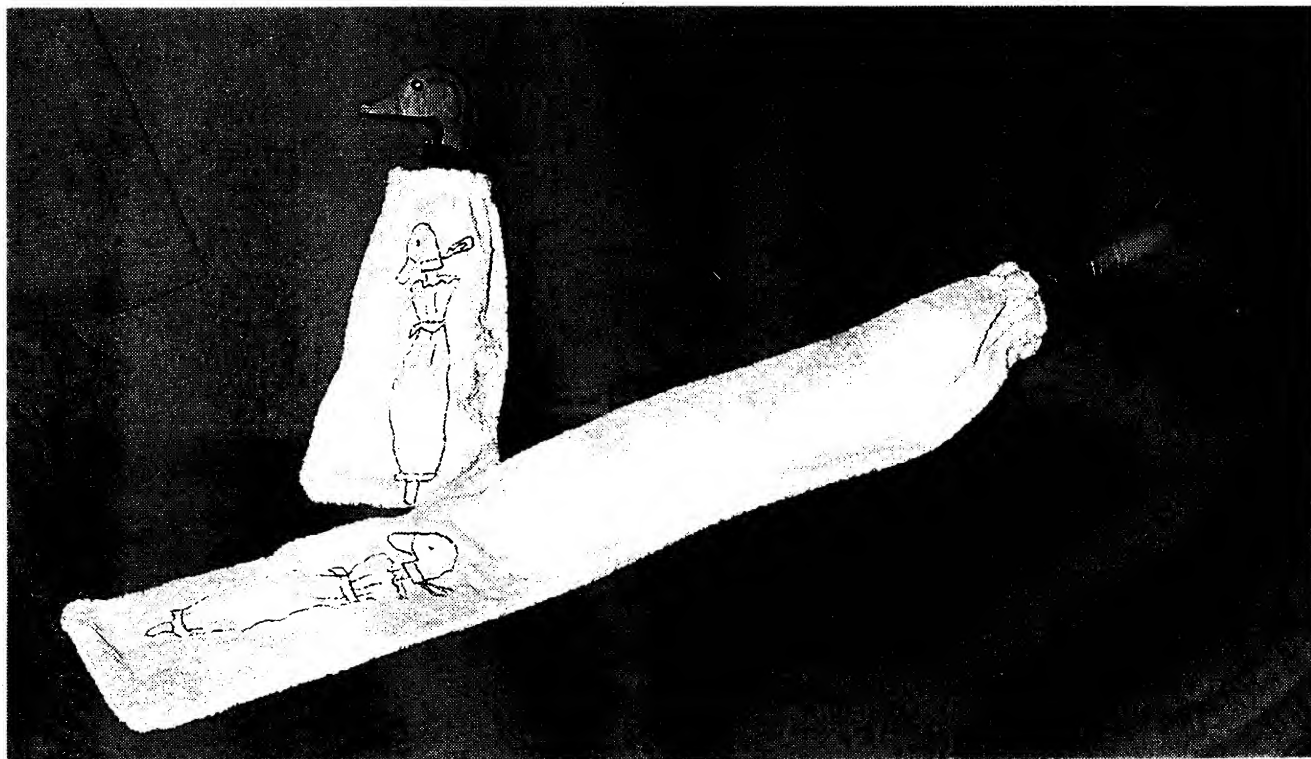
Dams and wetlands are important components of any farm. If possible, when having a new dam dug, create an island for wildlife refuge. If you are fortunate enough to have a creek or other wetland area, ensure stock cannot foul it. Keep creek banks appropriately vegetated. Do not allow fertiliser or chemical runoff to pollute waterways. Many environmental weeds disperse along creeks and rivers, their seeds or other vegetative material being carried for long distances in the water, so it is especially important to choose species with this in mind and to remove existing problem plants such as crack willows. Aquatic biodiversity has its valuable role to play in maintaining a healthy ecosystem and a healthy farm environment.

A BROLLY GOOD IDEA!

UMBRELLA COVERS

by Pamela Odijk, Caboolture, Qld.

Photography: Herman Odijk



Having to deal with a wet umbrella can be irritating. Shaking it spreads the mess and standing it on its end results in a puddle on the floor or in the car. Coping satisfactorily with a wet umbrella in a shopping centre or library is also a nuisance. Inventor Yoan Tang of Taipei solved the problem by inventing a new kind of umbrella which can be forced inside out, forming a reservoir which collects all the water from the top surface which can then be tipped down a drain.

However, I have an easier solution in the form of wet-umbrella covers made from double-sided terry towelling. They are easily sewn and are ideal for keeping on your umbrella so that even when it's dripping wet it isn't a problem. This towelling absorbs the moisture without itself becoming saturated, so the wet umbrella can be popped inside your case, shopping bag or handbag without

harming anything else.

The covers can be made to fit all umbrella sizes from golf size to the small collapsible ones. The elastic around the top enables the cover to fit snugly around the umbrella when not being used. They are also easily dried and washed. They make a great gift for absolutely anyone and are sure-fire sellers on a craft market stall.

The cover can be plain or machine embroidered with an appropriate design such as the one in the photograph. Suitable and simple outlines to embroider can be found in children's colouring books.

MAKING THE COVER

Materials

- double-sided terry towelling

For a golf-sized umbrella, cut a large rectangle approximately 35 cm x 92 cm. For a small folding umbrella

cut a rectangle approximately 35 cm x 34 cm.

- matching cotton and a contrasting or a darker shade for embroidering or appliqueing a design

- elastic to insert in the top hem

Embroider or Applique Design

Embroidery or applique must be done before the cover is sewn together, as it is impossible to use iron-on transfers on terry towelling, the tissue or tissue paper method is used.

- Trace the design onto a large extra-strong white facial tissue or tissue paper (or use tear-away applique paper).

- Tack the tissue firmly around the design so it will remain securely in place and will not move while being embroidered.

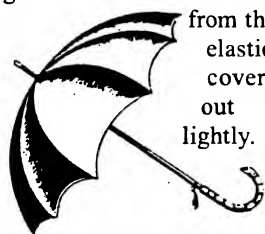
- Stitch over the design lines carefully with a dense satin stitch on a sewing machine.

• When the embroidery is completed, remove the tacking stitches and tear the paper away from the stitching.

To Make Up

With right sides together, seam the umbrella cover along the side and bottom. Double sew as well as zigzag (or sew seams on an overlocker) to prevent fraying. Be careful not to stretch the towelling as you sew.

Overlock or zigzag the top of the cover if necessary and turn over a 2.5 cm hem. Sew down this hem leaving a small opening through which to insert the elastic. Sew another line of stitching on the outside of the cover, 1 cm



from the top. Insert elastic. Turn the cover right side out and press lightly.

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SOUNDS PERFECT



by Susan Dalitz, Woodcroft, SA.

The day was ideal, brilliant sunshine, windless and warm. Just the day to finally make the first move towards our dream of self-sufficiency with a little piece of land in the country. The newspaper ad made it seem that fate had stepped in to lend a hand: 10 acres of usable land; a charming old farm homestead; outbuildings including a country cook-house, shearing shed, chaff and buggy house, smoking room and so on. All within our budget. It sounded like Paradise. Peace and privacy within a couple of hours of home.

Two hours later, we arrived at the closest town to our dream property and set about finding the real estate agent. No problem there and we were soon on our way again, armed with a photocopy map and directions, on the last leg of our pilgrimage to Mecca.

So far, so good, everything was going to plan. We discussed the agent's one word of warning: 'Now, there's no electricity, you know'. Hey, who needs it? We expected that and decided the only problem was the lack of a hair-dryer, and if that is the biggest problem...

One hour later, and the tracks were becoming more and more obscure. Okay, we wanted isolation, but those rocks were going to punch out the car muffler pretty soon. We circled, we backtracked, and finally, in desperation, we took what appeared to be an old sheep track. It was easy to imagine that we were hundreds of kilometres from the rat race. Yeah, this was exactly what we'd had in mind. Then we saw it! The yellow sign marking the property and a four-wheel-drive vehicle parked on the roadside. A man was pulling down the fence (we assume it was the driver of the said vehicle) to give access to the property. Here we are, let's go get it!

We approached the fence destroyer and asked if it would be all right if we walked up to the homestead, which was a speck in the distance. (Again ideal, we didn't want to be on the road after all.) He goggled at us for a few uncom-

fortable seconds and garbled something which we took to be permission. He didn't try to stop us anyway.

As we trekked towards the buildings we noted that the soil, although dry as a bone, was indeed usable. With a bit of irrigation it would be quite sufficient. The acreage was rectangular and almost flat. There was just a slight slope away from the homestead towards the road. Perfect for the dam and water-birds we had in mind.

But, eventually, it had to happen. In the space of the next 15 minutes our hopes for this particular piece of land were dashed. In short, we reached the 'charming homestead'.

It was total ruin and I for one was not prepared to even go inside. What we saw through the broken windows was quite enough. The floors and ceilings were in imminent danger of collapse and everywhere there were signs of squatters.

The 'country cook-house' was a small room with three walls (the fourth and the ceiling were long gone), with the frame of a wood stove, a chimney, and the distinctive aroma of urine. That particular fragrance hung over all of the buildings.

How anybody gave names to the piles of rubble and christened them smoking room etc is a mystery to me. Maybe they found a cigarette butt. The residence was all that was standing and its days were numbered. Of the verandah's four posts, only one remained.

Climbing around the rubble at the rear of the property, we discovered a huge bone. Okay, so maybe some dog had been there recently, but, nevertheless, we decided that the discovery of our bodies could take years. We hastily headed for home.

The property certainly had potential, for a person with a whim and an awful lot of money, but not for those of us on a limited budget. The experience has taught us to ask one simple question: 'Is the house livable?'. If we can't get a direct answer, we won't waste a day again.

MUSINGS FROM RINGAROOMA

by Doss, Ruby Flats, Tas

Hi everyone, I've been reading your magazine off and on since GR76 and have finally decided to have my two bobs worth. As my late father-in-law always said: 'What I know could fill a book, what I don't know could fill ten'. We have five acres here in a fairly frosty valley, with our rambling house and a cottage where Nana lives. Because of work commitments over the last several years, we haven't spent a lot of time here and are only just starting to get much-needed work done about the place.

I read about yams in one issue of GR and I remember the author/ess didn't write that they are planted in October and in the ground until late May or early June. They also need a lot of water during the hot summer months. They are hard to find here in Oz, but in Vic I found them at a green-grocer on Kew Junction (not good specimens, small and green), sold by the kilo. Also from Gippsland Seed Supply, more expensive, not edible. Here in Tassie you can find them at Youngs Vegie Shed in Launceston, in early June. I've kept my own to grow and they are up now which I am very excited about.

Is it true that you shouldn't feed cows pea straw as the nitrogen level causes them to pass blood in their urine?

Has anyone heard of purple yam powder, obtained from a Chinese grocer, and how is it used in their cooking?

Readers Digest have a great book out titled *Back to Basics* and I would recommend it to anyone starting out on their plot. As the title suggests, it's all about doing it the old way, but in a modern world, with lots of further reading recommendations. Pat Coleby's publications are listed frequently in the animal sections. You won't get much change out of \$60, but I have never read such a book, with every one of its 450-plus pages being interesting and helpful.

Has anyone worked out a successful yeast-free loaf for a bread maker yet?



Did those crunchy flavourful apples many of us remember from our childhood contain more chemicals than we were aware of and contribute to later health problems?

I've made a couple that tasted like rock scones. Any better? Before I moved to Oz 12 years ago, I always used to wash my bread bags and use them as freezer bags, them looking all daggy hanging on the line after being recycled so many times. But when I moved to Melbourne and got stuck in that high income, good time '80s rut, that was all by the by. Now, with a bread maker and trying to live more environmentally responsibly, I never have bread bags and begrudge having to buy freezer bags. You can only get so much Tupperware in the freezer, the rest has to do its duty and spill out of the cupboard every time you open it!

I recall reading in our local paper some time ago a wonder cure for eczema/psoriasis, made from banana pulp. A doctor from PNG had come up with it after watching his son suffer all his life. More I cannot tell you, but if anyone is really interested I could probably hit the library.

I would like the last word on cold sores. It is Acyclovir, but you will have to see your doctor for any more information I'm afraid.

I read in a book called *Spiderwatch*, that if bitten by a white-tail, L-Cystiene ointment is helpful, or aloe vera. I guess, by the same token, if L-Cystiene is available in tablet form it might help cut down on all those antibiotics you have to take.

And, niacin can help with dizziness. I am told it opens the tiny blood vessels in and around the ear. I had labyrinthitis (a virus affecting the middle ear as Menieres does) in Dec '93 and became chemically sensitive afterwards and always seem to be tired. All my favourite perfumes, certain soap powders, some cars and shops, glues, paints etc leave me dizzy and crook as a dog. It's really inconvenient. After reading Rachel Carson's *Silent Spring*, I'm starting to wonder if all those small doses of poison don't mount up and cause CFS in those more sensitive of us. I have an old Yates guide for 1967, which tells us to spray apple trees with DDT. When I think of myself as a five year old then and all the apples I ate throughout my childhood, straight off trees anywhere, it's pretty scary. And that's just the apples trees. What about all those vegetables we ate because they were 'good for us'? Were they covered in DDT, or arsenate of lead and worse? Who knows what toxins are built up in our bodies over the years. Yes, I know I sound paranoid, but I have only just finished the book and started questioning every spray can, detergent or repellent that ever entered the house or yard!

On the same issue, can anyone suggest further reading that is reader friendly on poisons, pesticides and chemicals now in use here. I'd like to know more. If the smell (or fumes) from a certain shampoo can make me feel ill, what's it got in it and what would it do to me if I used it? It's all very well having the ingredients listed, but not a great help if they mean nothing to you. There is a particular base smell in a lot of different cosmetic products which never fails to sicken me.

I am also wondering about additives

to hydroponic tomatoes. I am aware that they have a naturally occurring MSG. I only found out a few years ago though. Don't laugh, but if I eat yummy fresh tomatoes for breakfast, I feel nauseous all day, mushrooms the same. Anyhow, I find that hydroponic tomatoes seem to be ten times worse, so am curious about it. Not that it matters now we have our greenhouse in action.

Did you know there is summer and winter diesel? We found out when we parked our bus in December and went to shift her in July. She would not go. the fuel filter was full of a waxy residue which almost looked like sabotage. After bleeding it and getting a mechanic to make sure we were doing it right, we put a heater next to the engine which got things moving. We were then told (by one of those people that always appear after the event to say, 'I could have told you that', - you have all met him/her) that on the west coast in NZ years ago, the cockies used to put a gallon (4.5 litres) of petrol in a 44 gallon drum (200 litres) of diesel, when storing it. I guess deliveries weren't made too often.

Great inexpensive gift idea. Make someone a personalised hear-a-book. I

got an old spag' western book, hundred or so pages, and sat in the sun reading it to tape, adding my own personal comments as the story progressed and a few silly sound effects. It was much appreciated by the receiver who had a laugh a minute listening to my phony western barroom drawl and wry remarks about the so-called hero. It is something the whole family could have fun with; you could even have a narrator and play parts. It's a gift with special thought gone into it and one older folk will treasure.

I would love to hear from any Kiwi GR readers, particularly from the South Island, as I am an ex-ChCh girl, and also anyone who has done the round-Oz trip. Mail gets to me if addressed as below. I would like some specifics on growing kumara. Has anyone obtained 'Rua' potatoes in Tas?

Did you also know that children are 'age impaired' because they can't go into hotels. No, I couldn't believe it when I heard it either, that's why I wanted to share it with you. If that's all they have go to look forward to . . . This political correctness, which I personally do not adhere to, gets more out of hand every day. 'They' want to change every-

thing under the disguise of progress.

Life is good. To a certain degree you get out of it what you put in, but unfortunately some people will never be happy wherever they are. I have a beautiful copy of the *Desiderata* on my back door. I can see it when I'm making brekky and I try to bear it in mind all day, going in and out. Peace and happiness to you all.

Doss can be contacted by mail at Ruby Flats, Ringarooma Tas 7263.



NATURE'S BELLY, BABY & CHILD CATALOGUE

A new catalogue has been launched by two mothers in northern New South Wales with the aim of nurturing and inspiring parents during pregnancy, birth and childhood to choose safe, natural, ecofriendly products while caring for their family. The products featured include compostable disposable nappies, handmade ceramic children's tea sets and baby carriers. Contact Michelle Meares at Mother Nature Children's Shop on 02-6672-7722, or Nannine Baron at hug-a-bub on 02-6688-4455 to obtain a copy.



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LIQUID ASSETS

CHEAP TIMBER PRESERVATION

by Keith Upward, Darraweit Guim, Vic.

In GR 138 I described how to make a milk paint and various lime-based timber treatments. More terrific and cheap timber preservation methods follow.

Preservation of timber against rot and white ants has been a concern since settlement. Modern building practices, updated building regulations and potent chemicals have gone a long way in controlling this curse. Timbers such as redgum and ironbark can last many decades in the ground, whereas Oregon, while long lasting if kept high and dry, will rot out in six months if in contact with the ground, providing the white ants don't kick in first.

There are times when we might wish to use timber lying around the block to build something like a chook house, or garden seating, or anything that necessitates the timber being in close contact with the ground. Eucalypt timbers and untreated pine poles will provide years of service in the ground, providing they are coated or soaked with linseed oil, creosote, bituminous paint or CCA (copper chrome arsenic salts!!).

BUSH RECIPE

An old bush recipe is linseed oil mixed with charcoal dust! However, linseed oil is now very expensive so I have devised my own recipe that costs virtually nothing. I use saved up sump oil with any other recycled mineral or vegetable oils, turps etc thrown in. Then I mix in a spadeful of charcoal dust.

Obtain charcoal dust by first of all collecting charcoal from your fireplace or from burnoffs. To separate it from the ash put it in a bucket of water and stir; this allows the charcoal to float to the surface. Scoop it out and allow to dry. Put small quantities of charcoal into a separate container and pound with a heavy blunt-ended stick, similar to a mortar and pestle. When you think you have enough, mix the dust in with your oil and then apply as necessary to all timber surfaces that are either in or come into close contact with the ground. This application will form a pseudocarbon skin that no self-respecting white ant will want to penetrate for many years.

BREAK A RECORD

Many moons ago I spent some time as a shopfitter, mainly fitting out supermarkets where all skirtings had to be painted with an extremely quick drying black paint. The paint we used was 'black shellac', which was touch-dry in about 10 minutes. Many years later I tried to purchase black shellac from hardware and paint shops, all to no avail; nobody had even heard of it. I then discovered the recipe in an article on 'ebonising' while browsing through an old woodworking magazine.

If you can obtain an old pre-1950s gramophone record (pre-1940 is better), break it into small pieces and put in a medium-size coffee jar. Fill the jar to the top with methylated spirits and screw the lid on. Leave it for about three weeks, after which you will be left with a black or slate-grey sludge-like liquid that you will be able to stir into a black paint. You may find that post-1940 records have a paper core which is quite easily separated from the liquid then resoaked in more methylated spirits to further remove the black



Those old chipped records can be recycled into. . .



a cheap but effective black shellac-type paint.

substance. This can then be kept aside to be used as an aging stain or mixed with the first batch.

The black shellac can be used as-is for a flat finish, or it can be mixed with standard orange shellac to provide a pleasant semigloss finish. Thinned right down, the liquid makes a very good aging stain, or the sludge can be used as a filler that will quickly harden. With the lid on, the shellac will last indefinitely and, as it thickens, can be thinned to the required consistency with methylated spirits. After five years I am still using that which was made from the first record, which incidentally, cost me \$1 from the local flea market. Note: Post-1950 records are unsuitable, as most of them were made from vinyl/acetate.

HOMEMADE WOOD STAIN

Four litres of wood stain can cost you approximately \$80 (+ GST). Here's a recipe for dark oak stain that will only cost you a fraction of that.

Pour into a container a quantity of mineral turpentine, equivalent to the amount of stain that you think you may require. Mix to it a small amount of



A cheap dark wood stain can be made from turps and bituminous waterproofing solution.

‘brush-on bituminous waterproofing’. I use Ormonoid, available from most hardware stores in 500 ml tins (about \$20). Start with about a teaspoon of bitumen to half a litre of turps and add more bitumen if a darker shade is required. You will find that a tin of bitumen will make up much more than four litres. Store unused stain in container with a lid until required. It has an indefinite shelflife.

When you have applied your homemade stain (brush on and wipe with soft cloth), you can leave as-is (flat, dull), or apply a protective clear finish of your choice. I use shellac or Danish oil.

.....

JAR STERILISATION

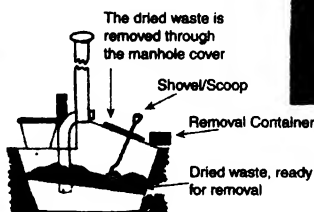
When making homemade jams, pickles etc, avoid the use of chemicals to sterilise the jars that will house this precious produce. Wash jars, bottles etc in hot soapy water, using pure soap flakes, rinse under purified water and place in an oven at 100 °C for 20 -30 minutes. Use metal lids in the same manner, or cover jars with wax paper or cellophane and an elastic (rubber) band, when filled.

Nicole Casson, Sedgwick, Vic.

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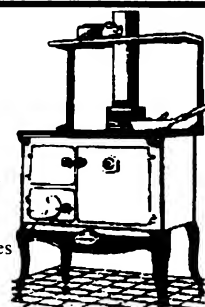
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LEGIONELLA IN THE GARDEN

by Mary Horsfall, Longwood East, Vic.

The tragic consequences of the recent outbreak of legionnaire's disease associated with the Melbourne Aquarium have once more brought this hazard into the spotlight. High-profile episodes such as this, and one in Wollongong about ten years ago, are generally linked with infections of *Legionella pneumophila* being spread via water cooling towers, but many people are unaware that various strains of legionella bacteria are commonly present in the environment.

Legionella is a commonly occurring soil bacteria, one serogroup of which (*Legionella longbeachae*) has been associated with cases of legionnaire's disease in Australia and several other countries. Longbeachae multiplies in all types of decomposing organic matter, especially under composting conditions of high nutrients with optimum moisture and temperatures. It has been found in logging waste, most garden soils and composting materials, and is estimated to occur in about 25 percent of commercial potting mixes, where it can survive for upwards of a year if the mix has not dried out.

When the water content of the organic matter is below 15 percent, longbeachae bacteria rapidly die. Temperatures over 60° C also kill them, but they do not survive well at temperatures over 40° C. Steam sterilisation of potting mix removes legionella organisms, but, as it also removes other soil microorganisms that keep legionella naturally in check, it can multiply even more

rapidly once conditions are again favourable. Once longbeachae from composted material or potting mix come in contact with the soil, the likelihood of the bacteria colonising decreases because of temperature and the action of other soil microbes.

TAKE CARE

Those of us who love to garden and often have our hands (even gloved) in the dirt, need to be aware of the possible dangers and take sensible precautions.

One train of reasoning suggests that, as dust contains insufficient moisture to support longbeachae, the inhalation of particles upon opening a bag of potting mix poses no danger. Another cautions that bags be opened away from the face and dusty bags be watered, on the theory that if dust gets into the mouth, or nostrils, any bacteria present could colonise in this warm moist environment, multiply in the body, and subsequently infect the lungs.

Longbeachae infection is thought to be caused by the inhalation of infected water droplets, or by getting them in the mouth. It's also possible the bacteria can enter the body via abrasions.

It's significant to note that all confirmed cases of legionnaire's disease caused by potting mix have involved people over 55 and with a history of respiratory complaints.

The following simple suggestions will help minimise the already small risk associated with handling potting



mixes or composted materials.

- Wear gloves when working in the garden.
- Wash hands with soap and water after handling organic material, especially before eating, smoking, wiping eyes or nose.
- Don't use any such material if you have open wounds, are suffering from a respiratory complaint, or have an otherwise compromised immune system.
- Open bags away from your face to avoid inhaling dust.
- Water plants growing in potting mix with a gentle nozzle so as not to throw up spray.
- Look for the Australian Standards logo when buying potting mixes. It is no guarantee that legionella bacteria will not be present, but it does contain a warning label with relevant safety information.

SHREDDED PRUNINGS

If you have piles of woody material from garden pruning, why not hire a shredder and incorporate the material in your composting/mulching.

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LET THEM EAT CAKE

by John Mount, Woodford, Qld.

Humphrey Bogart did not say, 'play it again Sam,' nor did Marie Antoinette, when told of the starving masses outside the palace, shrug her shoulders and say, 'let them eat cake'.

There are just two of the 'misremembered' phrases wrongly attributed to some of history's notables. However, I sometimes wonder, if, had Ms Antoinette tasted some of today's pastry delights, she might have said something like, 'To hell with the masses, this cheesecake is absolutely scrumptious, let them eat bread!'

Here are a few tips for cake enthusiasts:

- If you have no eggs for a cake, mix a tablespoon of milk with a level dessertspoon of custard powder.

- A delicious filling for a cake is made by mashing a banana, adding one tablespoon of apricot jam and one tablespoon of coconut. Beat well with a fork.

- When decorating a cake, a profes-

sional touch can be given by making chocolate 'curls'. Simply run a potato peeler along a slightly softened bar of chocolate.

- When a cake is burnt, scrape off the burnt part and brush the cake with beaten white of egg, then dust with castor sugar. Replace in a slow oven for a few minutes.

- When jam is used as a filling for cakes it often tends to soak into the cake layers. Prevent this by lightly buttering both faces of the cake before filling with jam.

- A delicious crunchy topping can be made by beating one egg white until frothy, then adding half a cup of sugar, a pinch of salt and a few drops of vanilla essence. Spread evenly over cake before baking.

- Before turning out freshly cooked cakes and puddings and running the risk of breaking them, let them stand for five minutes to allow a little shrinkage.

- To improve the flavour and appearance of cakes and puddings, add a little cold tea to the mix.

- Adding one teaspoon of molten dark chocolate to the treacle will enrich the flavour and colour of gingerbread.

- If adding coconut to a cake, allow it to soak in the milk that will be used in the mixture, otherwise it will produce a drying effect on the finished product.

- Cold coffee added to a ginger cake or a pudding mixture instead of milk will enhance both the flavour and colour.

- Sift packets of cake mix before use to produce lighter and higher cakes.

- The addition of a few teaspoons of marmalade to a rock cake mixture enhances the flavour and keeps the cake moist.

- Use a thread to encircle a sponge cake, cross the ends and pull to cut the cake into two layers.

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Kimberley Calling

by Louise Graves, Kununurra, WA.



I live in the Kimberley on an area of land called CleanSkin Creek, named for the very reason that it has never before been settled, or should I say 'branded'. The following article is about what I do at CleanSkin, why I do it, and a little about the predicament of the Kimberley. My hope is that you will be interested enough to consider a visit to this area.

The reason I came to live here is that I'd had a gutful of the mad world, with all the hectic hustle, the infinite cycle of effort, the depressing reality that so much of our precious earth is cared for by only a handful whom the population at large wipe off as 'crazy greenies'. After putting some effort into saving Timbarra (northern NSW) from the grip of gold fever, and watching my friends spend all their resources to take a giant mining company to court, I decided there must be a better way. I had an incling that if precious regions were settled before 'giants' came in to grab what they believed was theirs it wouldn't be so easy for them. But where to go? Some 20 years earlier I had lived on the East Alligator River, lobbying against the proposed uranium mines. I know the sheer magic and mystery of that country for I have

walked all through it. Hordes were now descending on that area again to try to pull out the toenails of the giant.

I have four children; I wanted somewhere I could settle and offer them a chance to contact what I believe we all inherit – the wonders of this land. After a good deal of thought and some travelling, I decided that I would go into the Kimberley. I had no idea where, how or why, but my 'inner voice' smiled and a process started that I was reluctant to stop. First, out of the blue, I met a fellow who said he was going precisely there. He had friends who lived a 35 minute light aircraft flight away from Kununurra on a stunning piece of land and they were open to genuine interest of people who wanted to help them with what they were doing. 'Which is what?', I questioned. 'Why don't you come and see for yourself,' he offered.

So began the journey north. Some time in November 1997 I stumbled out of a C-206 (light aircraft) onto a land known as 'Kachana'. My first reaction was – this is a mistake, no one could live here. All I saw was rocks and all I felt was hot. The family who live here were so welcoming that I thought a few weeks stay wouldn't hurt. The day

after my arrival I was taken on a tour. We walked a lot that day. I was shown areas that had been as desolate as most of the country, but were now green and lush. My new friend explained the work he does and why he does it. Primarily, he wants to try and save this bit of the Kimberley that he manages. He believes in a future for his children and that his contribution can either help it or hinder it.

One of the prolific pests of the Kimberley is feral cattle, the other is feral donkeys; there are two more – fire and floods. The first thing he did when he took up the lease for 'Kachana' was to organise a huge muster to get rid of as many Kimberley Short Horn cattle as he could.

This done, he began the patient process of domesticating a small herd of about 60 cattle. These cattle he can now walk amongst and call each by name. They follow him around like children of the Pied Piper. With electric fences he sections off small areas of land to be grazed for a short period of time, one to two days. The cattle are then moved to the next small section. The result is high density grazing where the cattle don't wander around patch grazing only the choice bits until

there is no more, but eat an area equally, drop cow pats, and with their hooves churn up the soil so it can be aerated. Each evening at about 5pm a hum fills the air. My friend smiles and says, 'Here come my greenies.' His greenies are dung beetles that land on the freshly dropped cow pats and churn them over so that by morning they are completely broken down and the goodness is carried deep into the soil. Where grass is growing, my friend, his children and any visitors to 'Kachana' cut it and transport the cuttings to areas where there is no grass. I have seen in the year I have been here areas that were reduced to bare soil now rich enough with lush grass that horses can have a quick two-day graze.

The inspiration I felt came partly from this work, but that wouldn't have been enough. People are doing fantastic things with the land all over the planet. It was, and is, more to do with the country itself. To describe this giant of a landscape I risk resorting to platitudes. There is a stillness, a quietness, a grandeur and magnificence. There is also a vulnerability and fragility that one feels one must protect. The truth about this last frontier has been revealed to me even though I wish it wasn't the truth. Because of feral animals, fire and floods all working together the Kimberley soil is washing away at an alarming rate. When I look at the bare rock landscape, I know now that in reality it should be covered with soil and flora. There is a conviction that large areas of the Kimberley were once rainforest. Difficult to believe if it wasn't for the pockets of remnants, like the sandpaper fig I sit under by a cool stream to write this article.

Over a period of weeks, extending



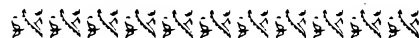
An area where children can make contact with the wonders of the land. The Kimberley needs human TLC, but has much to offer.

to months, I could feel a commitment to the land growing within me. It is my opinion that much of our planet has indeed been taken to the tragic state where it now needs human intervention if it is going to rebalance itself to a state of continuity. A comical twist that the very species who have destroyed have also the power to heal. I feel this about the Kimberley, where I see a land so misunderstood and undernourished in terms of healthy commitment to it. There are places all over the planet where people are consciously trying to rectify out of control damage. The Kimberley was certainly an answer to what I had been looking for; three of my children love it and the fourth is yet to come here. It offers me peace and health; It also offers me purpose, for I have the feeling it needs me at the moment as much as I need it.

So, after very little procrastination, I decided to settle here and chose CleanSkin Creek for a retreat. The man I came up here with (Sandor) has built a substantial shelter and I have a vegetable garden that is starting to produce with the help of compost, chooks, horse and cow manure and plenty of water. The shelter is to be a communal kitchen, as it is our hope that people will come here either for a holiday retreat or to work on the land. We have a solar system that operates a freezer,

lights, RFDS/school of the air radio, computer, printer and other appliances. The double-edged attraction and drawback is the remoteness. Personally, I love it here and never feel isolated. How can one feel lonely with the variety of birdlife that is here chatting and singing constantly, the clear streams that soothe a body, the starscape at night, the escarpment that meanders like a giant python sleeping but ever watchful? To get here one must fly in with local a airline. We actually have our own airstrip! The greatest thing I feel CleanSkin has to offer is unique access to a remote and beautiful part of the Kimberley.

If you feel inclined to retreat, to do land work, permaculture gardening, birdwatching, bushwalking, catching and taming wild donkeys, or just to have a look for yourself, please write to: Louise Graves, CleanSkin Creek, PO Box 779, Kununurra 6743.



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BERRIES FOREVER

by Bob Magnus, Woodbridge, Tas.

We live in a very picturesque part of Tasmania, the D'entrecasteaux Channel, known locally as 'The Channel', which flows between Tasmania itself and Bruny Island. As you drive south from Hobart (it's about a three-quarter hour drive), each village – Snug Kettering, Woodbridge, Middleton, Gordon – has little roads that run from the main road down to the water, all called 'Jetty Road'. In most cases the jetties don't exist any more but the name lives on. Up until 60 years ago these jetties were the lifeline of the Channel; barges, punts and ferries plied the waterway delivering people and goods but returning to Hobart with the produce of this little area: apples and berries. Yes, the areas around Hobart were the main berry areas of Australia.

Many people may remember Henry Jones IXL tins of raspberry jam and the Henry Jones factory was a huge imposing Georgian sandstone building on the docks in Hobart (now the art school).

Through a combination of circumstances, by the 1960s many of the area's berry farmers had gone broke. Of those remaining, many simply walked off their land after the 1967 bushfires. Unfortunately for the children of the berry growers, the picking season coincided with the Christmas holidays and they had to spend all January and February picking in the berry patch. One can still meet these people, now in their 60s, who say, 'I just hate berries,' or, 'I still can't stand the sight of berries'.

The berries, raspberries mostly, were picked into kerosene tins with a wire and hose handle and taken down the jetty road to be weighed and tallied, then picked up by the boat and taken up to Hobart for processing. It was one of those relentless farming activities as, after the berries were picked, the old canes were laboriously cut out and the new ones tied up, and so on through the season.



With a little planning you can have fresh berries over several months, and preserves for the rest of the year.

At that same time, blackberries were threatening to take over many parts of Australia. There were impenetrable thickets invading bushland and grazing areas. In late summer we'd go west of Sydney to have a picnic and pick blackberries. We'd go home with billies full and mother would make fantastic blackberry jam. In about the early '60s the herbicide 2,4-D was invented and the blackberries almost disappeared as councils sprayed them out of existence.

Raspberries are upright and shrubby and blackberries are vigorous trailing vines, but in reality they are very similar. They can be (and actually have been) crossed, and the loganberry is considered to be of this parentage. Their annual growth cycle is exactly the same. Actually, when you understand the growth cycle of berries their culture is dead easy, if still a bit prickly. It's just the same for boysenberries, youngberries, lawtonberries, sylvanberries and all those new ones appearing – all of them mixtures, selections or hybrids of wild brambleberries found growing naturally in just about all temperate parts of the world.

Each year in spring two things happen to a bramble plant. First it flowers, producing white or sometimes pale pink flowers just like a miniature wild

rose (after all they are closely related), which quickly fall, leaving the little berries starting to form. At the same time, from the rootstock new shoots, soft and succulent, are starting to appear. In the case of raspberries new shoots grow straight up, but in the case of the running varieties these can end up anywhere and, if you don't pay attention, by the end of the season you've got a monstrous tangle of thorny canes (sound familiar?). The secret of managing these running vines is to have a trellis with two wires, one at about 80 centimetres and the top one at about head height. All those wild running canes that appear in spring and grow so rapidly are bundled together while they're soft and tied loosely to the bottom wire with baling twine. At about Christmas time – earlier or later depending where you live in Australia – the berries are ready to be picked. After this those canes slowly die off and by late autumn are dead and brittle. Okay . . . You get down on your knees and cut them out at ground level. It's not hard to see which are the old dead ones and which are the young green ones. It's just the same with raspberries or with the running-type brambles: You pull out the old dead shoots then lift those bundles of tied-up young shoots from the bottom wire and tie them a bit tighter to the top

wire – wear gloves and long sleeves. In the coming spring they are the ones that will flower and fruit for you, the new shoots appear again from ground level and the whole process is repeated. If you do it this way, you'll tame the monster and get lots of berries.

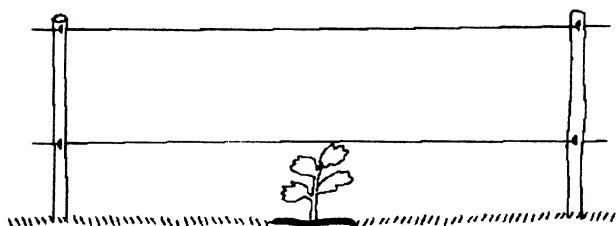
Now, my wife, who comes from Europe, just loves berries – loves picking them, preserving them, making jam and freezing lots – so I do all the work up to harvest then she takes over. We have four short rows. The first is raspberries, about 20 plants approximately 30 centimetres apart. On the second row are three loganberry vines which are now, after 20 years, quite massive. Row three is black and red currants and a gooseberry (more about these

hopefully in a later article). And on row four we have a sylvanberry (also known as kroonberry), which is an improved blackberry with fantastic flavour, but very vigorous and thorny and it takes all our efforts to keep it to the two-wire system (but definitely worth the effort). The other plant on row four is a thornless blackberry, which is about four years old and also extremely vigorous, making canes three metres long in one season. We saw these growing in Virginia, USA, in a pick-your-own patch where, in typical US style, the rows were about a kilometre long – massive! The great thing about them is that they mature so late – mid February and well into March – extending our season by three

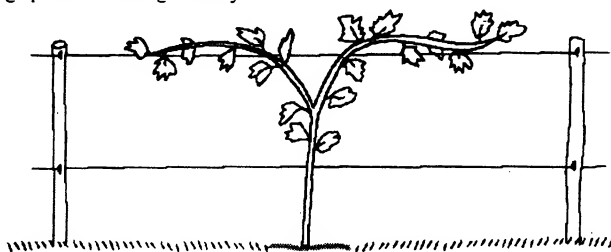
or four weeks. You have to leave them until they are really black and fully ripe, otherwise they are quite tart. So, the crop begins with raspberries around Christmas, then loganberries, then kroonberries from mid January for about a month, and the thornless blackberries last.

No article about berries is complete without talking about how to control birds, because the blackbirds, silver eyes, rosellas and all the rest will move in; after all it's birds and berries that belong together and birds are nature's way of spreading those berry seeds around. We find it absolutely necessary to net the lot. Our patch is about five metres square and I have poles three metres tall around the edge from which I hang the net – top and sides. It stays there from Christmas until the last blackberries come off in March, when we roll it up until next season. But if you have a smallish suburban garden they can well be grown on a back fence, either raspberries or the more vigorous running types, on the two-wire system. Best of all, they are very happy on a south-facing wall or fence where they receive only minimal direct sunlight. Actually, this is often the best place for brambles as they're not very happy (particularly raspberries) when temperatures go over 30° C. On such a fence it's quite easy to drape a net down and cover the lot.

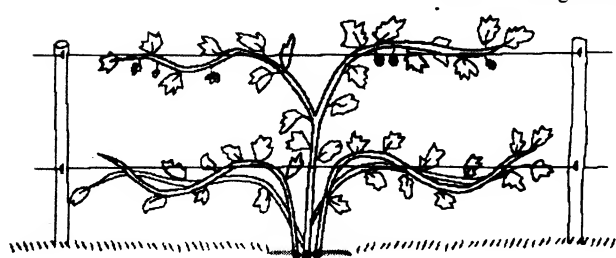
Berries are very easy to grow; they don't need massive amounts of fertiliser or water. It's good to keep weeds to a minimum though, as it's hard to weed in amongst those prickly canes. Ours get an annual mulch of horse manure and a shovelful of poultry manure if they look as if they need an extra kick along. If well looked after like this, a berry patch will virtually last forever, producing all those berries year after year.



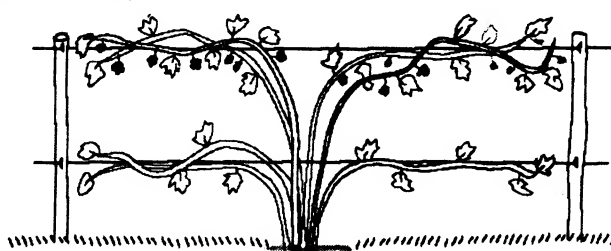
Early spring, plant little loganberry.



End of first growing season.



Year 2, first crop.



Year 3 and subsequent years, lift young canes to the top wire. Tie new ones to the bottom wire.




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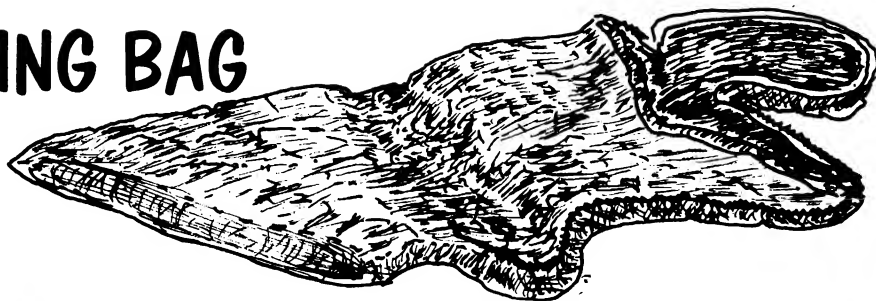
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A COSY SLEEPING BAG

by Lorna Freegard, Albany, WA.



Here is an idea I had that I thought might be of use to some other GR readers. Have you ever had one of those sleeping bags that is nylon on the outside and soft thin cotton on the inside? They are great until the cotton lining decides to give up the ghost and fall apart. I had one that got to that stage, and really it was then neither use nor ornament. If I tried to get into it, my legs would always find one of the holes, tear it, and make it bigger. I was reluctant to throw it out since the outside nylon was as good as new, so too the zip.

Our local supermarket had a promotion on thick recycled cotton blankets for \$3.95. I bought one because I cannot wear wool next to my skin, and I liked the idea of them being made out of recycled fibre. I had no idea what I was going to do with it until I got it home, then it became obvious.

I unzipped the sleeping bag and opened it out flat with the torn lining

facing up. I laid the thick cotton blanket out on top, and it was almost a perfect fit. I needed to fold the top ten centimetres down underneath, and five centimetres down the side like a hem. I left a couple of centimetres clearance for the zip so that it could still be done up without jamming on the blanket. Then all I did was take a large needle and strong canvas thread and do fairly big hand-stitching all the way around the outside of the bag, and twice up the middle where the bag usually folds in half. I pushed the needle right through to the nylon side, then back again, so that the stitches held the old lining and padding in place. If the old lining was too bad to save, it could be removed and two blankets sewn on for extra warmth. I find the sleeping bag is now warmer than it ever was and wonder if I should do the same to other 'good' bags to increase their warmth.

I have noticed ex-army wool blankets for sale in camping shops, for very

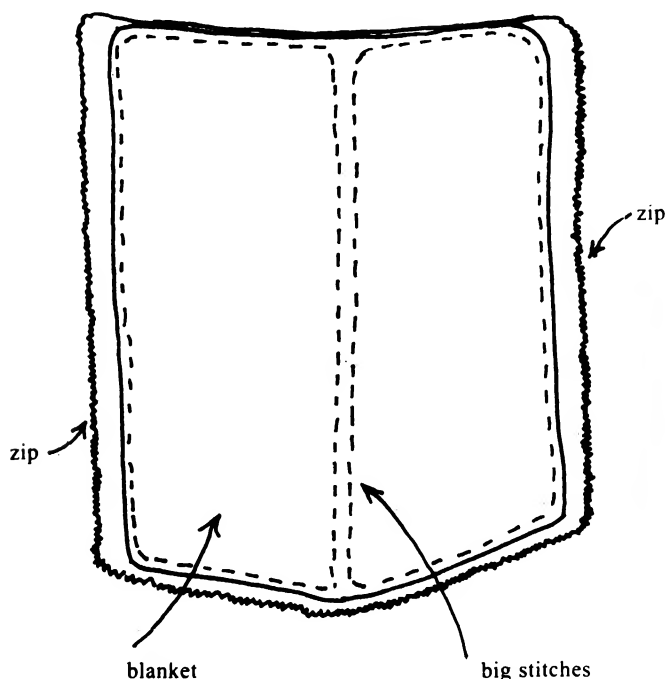
little cost, or wonderful wool blankets with a satin border at Red Cross or other charity shops for as little as \$2. These would be a wonderful alternative to the cotton one I used, if the user could bear wool. For \$3.95 I now have a sleeping bag as good as a new one, and satisfaction that I have done a spot of recycling again.



CARPET SHAMPOO

This is the mixture I use to shampoo carpet: I boil a teabag in ½ cup water for a few minutes. Add the tea, a small teaspoon of eucalyptus oil, 2 – 3 drops clove oil and a few drops allergy-free detergent. Mix together with enough extra water for one large room. My theory – the tea helps kill dust mites, eucalyptus and clove are disinfectants and the detergent helps to mix oils into water.

Marlene Castle, Swan Reach, SA.



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DANGEROUS FOOD PLANTS

by Chris Doucouliagos, South Oakleigh, Vic.

Most of our plant foods are quite safe; however, a fair proportion can have harmful effects, and some can be quite dangerous. These negative effects do not mean that the plants should not be consumed. I relish most of these (especially cayenne peppers), and many are important components of people's diet and nutrition. Rather, the consumption of some plant foods has to be monitored and excess intake avoided.

The list below is not exhaustive; readers should explore the nutritional content of all foods they consume. Nor does it include poisonous plants commonly grown in parks and gardens but not used as food (oleanders for example). Just as we are concerned about pesticides in our foods and the way food is grown, we should also be concerned about the type of foods that we eat.

All of the foods in the attached chart can still be enjoyed, however, care should be exercised. The traditional tea and coffee (containing tannin) and spiced cake (containing nutmeg), is a very popular combination. No doubt some of its popularity is in the substances contained in this respectable culinary treat.

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Plant	Edible Part	Caution
apple tree (<i>Malus sylvestris</i>)	fruit	Apple seeds contain cyanide. Consumption of large quantities can be fatal.
cayenne pepper (<i>Capsicum minimum</i>)	fruit	Excessive consumption can lead to gastroenteritis and kidney damage.
elder (<i>Sambucus</i> spp)	berry	Some species are quite poisonous (<i>S.canadensis</i> and <i>S.nigra</i>). Cooked berries are safe, except for <i>S.ebulus</i> and <i>S.raemosa</i> .
horseradish (<i>Moringa oleifera</i>)	root	Can cause diarrhoea or night sweating. Never eat a large quantity at once.
mulberry (<i>Morus rubra</i>)	berry	Unripe berries and milky juice can cause hallucinations, stomach and nervous upset.
nettle (<i>Urtica dioica</i>)	leaves	Use young plant parts only. Old parts can cause kidney damage and poisoning.
nutmeg (<i>Myristica fragrans</i>)	seed	Use very small amounts. Nutmeg causes poisoning, hallucination and death.
watercress (<i>Nasturtium officinalis</i>)	plant	Excessive intake causes kidney damage.
pomegranate (<i>Punica granatum</i>)	fruit	Rind can cause vomiting and cramps.
rhubarb (<i>Rheum palmatum</i>)	stalks	Leaf blades contain oxalic acid causing poisoning, and are best used as an organic insecticide.
rosemary (<i>Rosmarinus officinalis</i>)	leaves	Excessive intake causes poisoning and death.
rue (<i>Ruta graveolens</i>)	plant	Excessive intake can cause mild poisoning.
saffron (<i>Crocus sativa</i>)	stigma	As little as 10 grams of saffron can cause death. Saffron causes damage to kidneys and central nervous system.
sage (<i>Salvia officinalis</i>)	leaves	Excessive intake can cause poisoning.
sorrel (<i>Rumex acetosa</i>) and spinach (<i>Spinacea oleracea</i>)	leaves	Both contain oxalic acid. Excessive intake can cause mild poisoning and kidney damage. The amount of oxalic acid increases in plants grown with concentrated soluble nitrogen. Sorrel reacts unfavourably with stainless steel knives and nonstick cooking utensils.

People have always enjoyed eating a variety of foods. The choice of food in Australia has increased tremendously, with new cheeses, breads, and dips from Europe and the Middle East, new vegetables from Asia, and new fruits and berries from Latin America and

Asia. As with conventional plant foods eat wide and varied, eat well and be merry.



Livestock Health and Management

Information You Need but Haven't Known Where to Ask

If you have queries on any type of livestock send them in and we'll get our panel of experts to research the problem for you. Send them to Livestock Advice Page, Grass Roots, PO Box 117, SEYMOUR 3661.

MELIOIDOSIS IN GOATS

I live on five acres 25 kilometres south-west of Townsville in an area that has been quite arid up until 1998. We have had a couple of good wet seasons, but this year we have had the biggest wet season on record. As a result, the melioidosis organism has been prevalent in the soil and has affected several people in the Townsville district, including some deaths. It has also affected livestock in the district, especially goats, and I have lost several to this disease. This was confirmed by autopsies carried out by the DPI. The disease took the form of severe pneumonia, starting off with runny nose, weight loss, and progressing to collapse in the front legs and very noisy laboured breathing. I have been told that the only way to prevent this disease is to keep the goats on raised timber or concrete flooring and hand-feed for the entire wet season. Is there anything else I could do to help prevent this disease? Can anyone advise me re information regarding this disease and goats. I am unable to find any mention of melioidosis in my goat books. Thank you.

**Sue Gibson,
OAK VALLEY 4811**

This disease is certainly a new one for us as well; perhaps there are other northern readers who can offer management tips. It must be emphasised it is not species specific but infects goats, sheep and pigs, very

occasionally cattle and horses. Humans are at risk too, as Sue's letter indicates. The disease is caused by Pseudomonas pseudomallei, a gram negative aerobic bacteria. It can be transmitted by almost any means, but contaminated water and soil are the major culprits. The organism has been found to remain infective in muddy water for up to seven months. The bacteria are excreted in faeces, so easily find their way into pools of water lying around or even into feed. The chances of infection increase during periods of warm moist weather, especially if there is overcrowding or if muddy yards and paddocks are in continual use. The drop in hygiene that accompanies such muddy conditions is sufficient to allow this opportunistic bacteria to proliferate if the pathogen has been introduced. To make control even more difficult, sucking insects like fleas and mosquitoes are considered vectors, as are rodents especially water rats. The latter in particular has been regarded as a major reservoir of infection to other species. The disease can take a virulent form, as you have discovered Sue, or a chronic course. Animals suffering the chronic form can show few signs until stress triggers serious symptoms and they can also be asymptomatic carriers. The disease has occurred in the Townsville area for several decades and in the 1970s was a problem in many piggeries in the area. From this profile of the disease it will be difficult to keep goats on contaminated soil, especially during very wet periods when conditions, understandably, become very wet and muddy. Keeping the goats in optimum health will help, and Pat Coleby's newly released book on goats should be consulted, 'Natural Goat Care', CSIRO Publishing ph: 03-9662-7500. As well, try to obtain

access to T G Hungerford's 'Diseases of Livestock', as this book contains numerous references to melioidosis. Vets in farming areas would certainly have this book, as would colleges or universities offering livestock courses.

BANTAM DUCKS


We're in town and want to keep a couple of ducks. Our friends suggested a bantam breed, but we have never heard of bantam ducks. Are they available?

**Cindy and John,
YOUNG 2594**


Yes, several pure breeds are available, but a word of warning first. Bantam ducks are very prone to flying and may take off for greener pastures if not wing-clipped or kept in a covered yard. One wing only needs the first couple of flight feathers cut back to unbalance the bird and prevent flight. Breeds include the Elizabeth, Black East Indie, Mallard, plus miniatures of Silver Appleyard and Saxony.

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FEATHERED FRIENDS

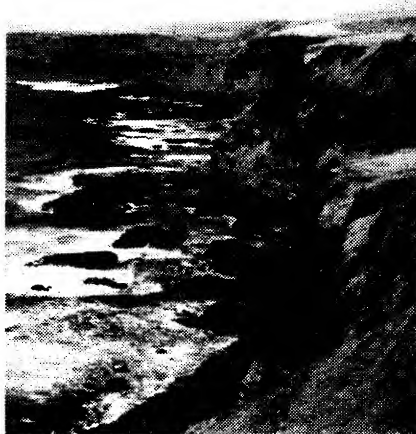
Apart from their intrinsic value, our native birds are valuable to us in many ways. They help control insects and pollinate our plants and are an essential part of the food chain. Many reports in recent times dwell on the probability of massive bird extinctions over the next 50 years, mainly as a result of habitat loss and fragmentation.

It is especially galling that even now that we are aware of the dangers to our bird populations, sensitive areas of habitat continue to be logged or otherwise degraded. A conservation zone for the endangered powerful owl was illegally logged in May this year, apparently because of an outdated map. Brolga numbers in the Murray Valley wetlands have dramatically declined, partially because of habitat and food loss since wetland areas have been 'reclaimed' and sown to crops, and, as a consequence, when brolgas have changed their diet and taken to eating (and dancing on) the crop, they have been shot. Brolga chicks are also very vulnerable to foxes. In March nesting sites of the critically endangered red tail black cockatoo (only 1000 birds thought to exist) near Edenhope were destroyed when a private contractor cleared 80 red gums from a property. Destruction permits for rosellas and lorikeets, including important pollinator species, are, reportedly, routinely issued in some agricultural areas.

To balance these gloomy scenarios, it is heartening to know that valuable conservation work is being undertaken in many areas. In the southern Riverina, for example, individual farmers, community groups, CSIRO and Greening Australia are cooperating to conserve the white cypress pine habitat of superb parrots, classified as vulnerable and rare. Remnant vegetation is being fenced and revegetated and a wildlife audit has been conducted to assist future planning. In 1997 Birds Australia established a reserve in South Australia and is now in the process of acquiring the 262,600 hectare Newhaven Station in the Northern Territory. The range of habi-

tats and species present will make this an important area for protection of arid-zone biodiversity. To purchase the property Birds Australia needs to raise \$1 million.

For more information or to make a donation ph: 03-9882-2622.



Despite its pristine appearance in many locations, Westernport Bay is facing severe environmental degradation as a result of increased surrounding development.

PROBLEMS IN MELBOURNE'S BAYS

Estimates of the number of marine pest species inhabiting Port Phillip Bay range from 99 to 145. These include Japanese seaweed, Mediterranean fanworm and the prolifically multiplying Northern Pacific starfish whose diet includes native mussels and scallops. Most pests are believed to have originated from discharged ballast water – now illegal. As the Bay appears to be an ideal breeding ground for many introduced pest species, there is concern that they could alter the whole marine ecology and lead to algal blooms.

A World Wide Fund For Nature report has put Westernport Bay third on their updated list of marine pollution hotspots (Sydney's deep-sea sewage outfalls have the dubious distinction of being top of the list). Westernport's problems arise from farming and hous-

ing development around the Bay leading to high levels of sediment and nutrients flowing into the water and degrading the marine environment. In one area, 70 percent of the seagrass beds – essential for fish breeding and habitat – have been lost in the last 20 years.

NEW ENVIRONMENTAL LAW

From mid July the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 will take effect. The new act replaces five existing acts and is being hailed as the most fundamental change ever to Commonwealth environmental laws. It empowers the states to undertake assessments (and also give approvals) on behalf of the Commonwealth and establishes an accreditation process through bilateral agreements with each state. It will reduce duplication between departments and give formal backing to the principles of ecologically sustainable development. It is a lengthy document and is available for perusal at the website:

www.environment.gov.au/epbc

More information is available from Environment Australia, ph: 1800-803-772.

BIOLOGICAL CONTROL

Two new insects have recently been released in attempts to control environmental weeds. A South American beetle, to be released in four states, is hoped to make an impact on blue heliotrope – it eats leaf tissue, leading to defoliation; and a Mexican stem-sucking insect has been released in a number of locations throughout NSW and Queensland to control lantana. Meanwhile, it has been reported that a Victorian herb grower has encountered damage to a comfrey crop from a leaf-mining moth released in 1989 to control Paterson's curse; borage crops are also at risk as the moth is known to be able to cross over into the Boraginaceae family. This was known to scientists at the time of the moth's release, however, the decision to release the moth was made on the grounds of predicted economic gains to cattle and sheep farmers.

FEEDBACK LINK-UP FEEDBACK

Greetings all,

We always look forward to GR, so thanks for the only magazine I'm prepared to spare a loaf for! We're a mum and four children who'd really love – indeed are desperate to find – somewhere we could call home. Ideally, somewhere within walking (we've no car) distance to transport or the services of civilisation, a cottage and a garden (I am blessed with green organic hands). Oh, and no ticks due to children's severe allergy to these (coastal perhaps?). Small deposit vendor finance? Please? We are reliable; n/s n/d etc. And artist/crafters also. We've endured some horrific 'human' traumas and would really appreciate somewhere to feel like home, not too expensive – just secure and quiet and at least not a leaky roof. I think the key word is 'safe'. Is there such a thing these days? Here, the buses stop at 2pm! It's true! We were hoping for northern New South Wales. We home school, so those institutions are not required. As I'm getting on in years and stress-related health problems accrue, I can't foresee myself first 'working to the dream'. I need the stability now in order to be able to do what I do to the best. Perhaps some caring soul has a cottage waiting for a **QUIET GENTLE FAMILY** who will tend a couple of chickens, feed birds and share home-grown goodies.

We pray for some peace. (we're in pieces). God knows we deserve it by now. In good faith.

EM,

C/- PO Box 117, SEYMOUR 3661.

Dear GRs,

We have three multi-use trees capable of giving nutritious delicious milk, albeit containing less calcium than cows' milk, yet much more assimilable. Custard apple or white sapote blended alone and frozen = ice cream. Blended with water the result is cream, milk-shake or milk, depending on the water proportion. Won't keep days, but won't have to! Likewise yogurt and cheese are by-products without additives as for soy 'milk'. However, the real precious dairy dream tree I figured would be the Peruvian cow tree (*Brosimum alicastrum*), concerning which, together with its other edible products and uses, I'd acquired scads of American data (a nominal charge to cover costs if needed). About '87, with great difficulty, I imported *Brosimum alicastrum* from Havana Botanic Gardens, Cuba – apparently the only such bank.

Treating them like platinum, I finally gave six of twelve received short-lived seeds to Brisbane's Mt Coot-tha Botanical Gardens where two survivors are now looming like the hardy (flood or drought) 40 metre miracle monster they can become, even though they grow best from cuttings. A nursery was unsuccessful with the remaining six seeds. As per initial agreement, Mt Coot-tha finally sent me two cuttings – only one survived, the third in Australia. My sample is still too delicate for cuttings. At this rate it seems a slim chance of fulfilling my dream to replace every soil-destroying cow by a land-saving cow tree in the near future. May have to settle for planting food trees in a strip right across the nation, a kind of public edible park!

Milking the *Brosimum alicastrum* is like rubber tapping for its milk-latex, without needing a vet or having to milk the darn thing regularly. It's so easy that simply removing a leaf from a twig results in milk dripping therefrom. Besides, you'll never catch mad cow disease.

Next of several vital projects for our highly sustainable home is to breed seedless breadfruit because these have about half the nutritional value of bread; a massive bonus considering the colossal energy needed to make bread, more still for toast, albeit zero to grow breadfruit. Any sources out there anyone? Thanks. Surely the additional message is to protect the world's forests of near-unknown treasures, just as Peruvians, Mexicans and Central American hill folk protect their cow tree habitat.

Pat ffyske Howden,
Cone St, MACLEAY ISLAND 4184.

Dear Grass Roots Readers,

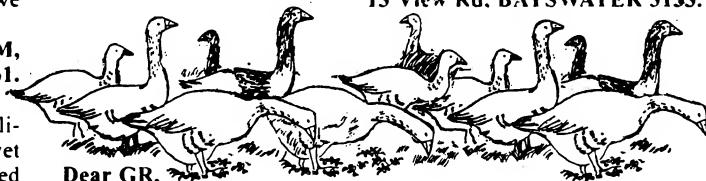
I'm writing this specifically for those readers living in the area of NSW bounded by the towns of **MUDGE, GULGONG, Coolah, Cassilis, Rylstone, Kandos and Dunedoo**. I am thinking of buying land around these areas. Could readers who have been long established there please give me information on anything about the area you live in. Topics I would be interested in would include land prices, soils, climate and weather through the seasons, farming enterprises and industries; markets the locations of and times that they operate, rental for sites, also types of markets available. I will also need information on the topography of the area and the ease of finding water.

For those readers who have moved into this area from the cities or other parts of Australia, please tell me about any problems you have encountered other than usual ones of settling in! Things I will be interested in include pests and vermin problems, problem weeds or plants, difficulties with shire or council regulations and obtaining a cash flow with enterprises on the land.

I will answer all letters from people sharing information with me from these areas.

Ronald Tan,

13 View Rd, BAYSWATER 3153.



Dear GR,

I am at my wits end to know how to **GET RID OF 27 GEESE**. We live on a small lake and several years ago someone introduced four geese to our lake. We have seen them increase to 27, and if my husband and one neighbour had not removed 67 eggs we would have had 100. I have tried the owners of the lake who advertised 'free to a good home'. I've tried RSPCA, DNRE, native wildlife animals, local by-laws inspector and health inspector, all telling me to contact, literally, each other! All quite sympathetic, but of no help whatsoever. Excuse the pun, but the geese foul up all around the bank/s (our backyard), are aggressive, especially in broody times, and very very noisy. They chase other water loving creatures away and the smell is most unpleasant. We are told we can eradicate (new word for killing), but if we try having them shot, the shooters will lose gun/s and licence because of shooting in built-up areas. What to do with all the bodies anyway? Yours in desperation. Thanking you for a great magazine.

D Henderson,

8 Lakeset Drv, TRARALGON 3844.

Dear Feedback,

My partner and I think GR is a wonderful magazine. We are very much into alternative lifestyles and self-sufficiency. We are writing to see if there are other readers interested, like ourselves, in a lifestyle that is holistic, not couple-based. Our dream is to purchase several acres of land and establish a **SELF-SUPPORTING, FAMILY COMMUNITY**. Persons we would like to be part of this community are couples with children already, single women who would like to have children, and single parents. The purpose is that everyone is a carer to the children, not just the biological parents. The concept of marriage is not relevant to our dream, so the idea of children born out of wedlock is not part of our value system.

We have had this idea for several years and feel it will go a long way to repairing the damage of broken lives that a consumer society has created. Even if people are only curious to know more about our idea or perhaps give feedback we would love to hear from you.

Anne Dwyer,

PO Box 36, BLAKEHURST 2221.

FEEDBACK LINK-UP FEEDBACK

Dear GRs,

Some people place a house brick in their toilet's water cistern to reduce the amount of **WATER USED IN FLUSHING**. It's much better to place a two-litre plastic milk container filled with water as this is about the same weight that a cistern is designed for. A brick soaked in water is much heavier and will distort some plastic cisterns so that they don't function properly and will even pull some off the wall. False economy indeed. Really, the best solution is to replace the old cistern with a new dual-function flush, as sometimes the amount of water for a good flush is reduced with a brick.

Waste vegetable oil can be obtained free from most fish and chip shops, and recycling it as diesel engine fuel is an accepted practice in many countries. Waste not want not is not so prevalent in Australia as yet and **BIODIESEL** fuel is mostly unheard of. With increasing petrol and diesel prices and increasing tax grabs on everything to pay for increasing inefficiencies, biodiesel may well become a widespread alternative and replaceable fuel in lieu of petroleum-sourced fuels. Australia is ideally suited to the growing of biodiesel sustainable fuels. How long will it be before someone does something? Bibliography and further reading: *From the Fryer to the Fuel Tank*, by Josh Tickell, \$46 includes postage & handling from: Alternative Technology Association, PO Box 2001, Lygon Street North, Brunswick East, Victoria, 3057.



Roberino,
Lot 4, ARRAWARRA BEACH 2456.

Dear GRs,

Suddenly one is involved with the study of the mags stored in the library, on behalf of an Aboriginal community near Fitzroy Crossing. It has been decided to learn to use a computer. One's mind races instantly to the question of the survival of earth and how we can **USE COMPUTERS TO HELP THE PLANET**.

An attempt was made on the library computer to locate anything under self-sustainable, but all that was there was a loan offer for projects, (internationally) based in USA. Very interesting, but little more. Really, what one needs to do first is a thorough check (permaculture seems to be the other site) on what is or isn't there. One is imagining firstly, organising a site (starting with a dictionary of subjects contained in the site) which could be similar to the organised release of, for example, every article printed in GR, on specific subjects, eg: chickens, grey H₂O, green manure. The site would require a coordinator who could edit and include submissions from wherever. One's not too sure how it's done. Does anyone have any familiarity with or thoughts on the subject? Maybe it could be the start of what one wants to call 'the self-sustainable environmental network of Australia'.

A physical opportunity exists out at Christmas Creek Station, (Wongajunka), for about 100 people to start. It is east of Fitzroy Crossing.

Annie,
Box 873, Broome 6725.

Dear GR,

I am writing in hopes that someone can help me and mine – four legs and tails – in my **PROPOSED MOVE TO TASMANIA**. Despite having been born here, I have *had* WA summers. The animals consist of four (at present) cats and a retired greyhound who is as good as gold with the cats! It is such a bind trying to work out self, car and animals arriving more or less together. Would the car be cheaper to send as backload on a truck for instance?

I will be looking for a place to rent and, having the car, am happy to be out of a city – no place would be far from a vet surely? Feel as though I'm moving to a foreign country! Hope to be gone before next summer. Where are you **ALLYSON EVERARD?**

Pat Lever,
26 Byers Rd, MIDLAND 6056.

Dear Grass Roots,

After living on the Gold Coast in the heart of Surfers (the high-rise city) for 12 years, my husband finally talked me into **THE BIG MOVE**. We had purchased a small acreage some two years before we built and I am so glad that his persistent nagging to get me out of there got through to me. For years he wanted to move off the coast but didn't know where to.

So we settled on our block and dreamed one day to build our house in the bush. I didn't realise how much trouble it would be to get a loan for rural building, even though we owned the land outright. But once again, after many failed attempts and many tears from me, my husband never gave up and finally a loan was approved. Our plans were starting to take shape.

Our house was finally furnished. We had planned to stay on at the coast for a while, but once the house was built that was it. We both left our jobs. We knew that work would be a bit scarce in a rural area, but we just had to do it.

Our friends thought we were mad. They'd say, 'But there's nothing to do. What are you going to do?' Well we'll always have something to do. We had the land cleared a bit when we hired a bobcat and did some landscaping. Then truckloads of soil and gravel for the driveway were ordered, plants and fencing materials purchased, and then the hard work began.

All those aches and pains, sweat and blisters, but when you stand back and see the results it's just so nice. It's lovely to sit out at night and see the stars, and the moon is so bright it lights up the sky. The air is much cleaner and you can smell a real earthy smell. All the birds chatter and black cockatoos lunch in our trees. We have breakfast with the kangaroos and a rather unusual lizard comes to visit us.

Our vegetables are growing, although I found something is getting inside the fencing to have a munch at nighttime, and we just planted our fruit trees.

I am enjoying every minute of it. It's very soothing in the bush. Just imagine someone riding up on their horse just to say hello to you while you're working in the yard. People wave to you when you drive past and they have a chat to you at the local store.

Now all we have to do is find work so at the end of the day we can sit back and appreciate it all. Who ever thought we'd be doing this at 40. I'm so glad I came around and made the move.

Julie Giffney,
Lot 305 Spiegel Rd, GLENWOOD 4570.

Dear Editors,

I purchased a copy of GR a few days ago and have thoroughly enjoyed it, especially the Feedback section. GR is a warmly written and informative magazine. I have already picked up a few more health tips to add to my own knowledge.

To the people asking about asthma, my daughter had either that or bronchitis (two different doctors, two different answers) and I found cold-liver oil capsules an excellent help in ridding her of a nonstop **DRY COUGH**. It took about four months to work, but natural cures take time. When we were kids, a lot of us were given cod-liver emulsion in winter to protect us from colds and flu. Remember that awful taste?



Annette Brayne,
77 Manchester Drive, HOCKING 6065.

Please keep letters brief, clearly written and relevant to self-sufficiency topics. Letters pushing barrows (religious, political or other) will not be published.

FEEDBACK LINK-UP FEEDBACK

Dear Megg & Mary,

I have been getting GR for two years now and think it is just so wonderful. It has given me endless ideas, and some are highly successful!

I thought GR might be interested in the enclosed information about a cancer cure incorporating sheep sorrel (*Rumex acetosa*). I was given this a little while ago and I am very interested in growing the **SHEEP SORREL** if I can find the true seeds/plants. We live very economically out of our organic garden.

If anyone finds out more information and where to get the true sheep sorrel mentioned in the article I would love to know.

**Marie Grofski,
M/S 194, GATTON 4343.**



Dear GR Readers,

I am writing to ask if anyone would have plans to build a **BOT-TOM-HEAT PROPAGATOR**, using a solar collector for heating water, and with a thermostat for regulating the temperature; 12 volt electricity would be another option. We would like to be able to get summer crop seedlings going a lot earlier and carry cuttings through the cooler months, so I hope someone out there may be able to help. We would gladly refund postage.

Megg, regarding your query on **KEEPING BIRDS OUT OF FRUIT TREES**; we have a small orchard of trees and berry trellises and the woven white netting is what we have found best. We take an approximate measurement and drape the cut netting over the tree, and after a day or so it settles with a bit of excess at ground level to ensure birds can't get underneath. The new growth at the top of the tree usually pushes through, but the netting is very easily pulled off at the end of the season. I agree that it is expensive, but we feel it has been worth it. Hovering hawks, cheap netting, glittering wine bladders, and waving plastic bags have never worked for us, but I have read that silver (rubber) snakes in the trees are a good deterrent. Hope this is helpful.

**Heather Sparrow,
PO Box 321, MOUNT COMPASS 5210.**

Dear Editors,

Our group has certainly had an exciting time of it lately. We had so many changes to make last year. The highly controversial topic of genetic integrity was last year's stumbling block, with the aims of the group being changed to meet the new challenge. The way the seed distribution network was set up in the past was not working. Seeds were being sent everywhere and supply could not even come close to meeting the demand. So, what to do? We asked our experienced members for ideas and, after many heated debates, we resolved to start **LOCAL SEED STORES**.

In the latest issue of our newsletter there is information and registration and the steps involved in setting up a seed store, with the Seed Collective acting as an advisory body on how to establish a network of links with other groups, promoting and training a network of local seed collectors, the seed distribution network and finally the equipment/establishment of a local seed store.

Of course, most of our members are not going to want to establish a seed store. So it will be a year or two before seed will be available to those members who are regenerating private property. In the meantime a seed collectors handbook is being developed and this will have easy-to-follow instructions on how to collect rainforest seed. Members who want to get started on regen can get all the info on how to collect and propagate their own rainforest seed. The handbook is currently being produced and will be available mid year.

**Mark Baird,
Rainforest Seed Collective,
29 Sunset Ridge Drive, BELLINGEN 2454.**

Dear GRs,

A small group met at Helen Weston's urban home recently to discuss the possibility of establishing a **SEED SAVING GROUP IN ADELAIDE**. The group explored Helen's very productive backyard and in true seed-saving spirit eagerly sampled some produce and gathered some seeds and cuttings.

The aims of the SA Seed Saving Group are: sharing fruit, vegetable, flower and herb seeds/cuttings/bulbs; educating people about saving heritage seeds/cuttings/bulbs; providing work-shops/displays. Their long-term view is to develop a regional seed bank. The group meets at different locations all over the Adelaide area. Contact Helen Weston on 08-8298-5664 for the next meeting and venue.

Leading supermarket chains have, blindly or otherwise, allowed themselves to become the distributors of the Federal Government's brochure 'Genetically Modified Foods'. Although authorised by the Commonwealth Government, it is an inaccurate, one-sided and biased publication. This brochure deliberately omits to inform the general public of the significant negative impacts genetically modified (GM) crops could have on ourselves and on our environment.

GM-CROPS 'inserted' with pesticides have the potential to indiscriminately destroy beneficial insects, as well as threatening the general ecology surrounding these crops. The government owe it to their constituents to be open about the fact that farmers will no longer be able to 'wash off' some of the pesticides currently used externally on their food, thereby digesting these GM-pesticides along with the GM-crop product, with the long-term effects still under debate.

GM-seeds, sourced from large corporations, have had their genes altered to ensure the product no longer produces a next generation of seed and therefore a new genetic pool. This element 'locks' farmers into buying new stocks of seed each year, denying them the opportunity of experimenting with new strains. The future control of our basic foods has been removed from the common person (the majority) and taken over by scientists and multinationals (the minority), who are looking for a high rate of return on their investments.

More and more consumers are seeking GM-free food and the current government's attempt to persuade the public that the GM-industry will be for the common good of all Australians is very shortsighted. Australia's traditional export markets are currently under threat, as Europeans, Asians and North Americans shy away from GM-food crops. Marketing surveys clearly indicate that consumers do not want their food to be technologically modified.

To express your concerns about this brochure and its hidden agenda, write to your local supermarket that is distributing the brochure with its lopsided point of view. Also, write directly to Biotechnology Australia, GPO Box 9839, Canberra, ACT 2601, www.isr.gov.au/ba, the Federal Government agency responsible for producing the actual brochure.

**Allison Miller,
73 Kesters Road, PARA HILLS WEST 5096.**

Dear Megg,

Firstly, thank you so much for the great support you have given us by advertising our Seventh Australian Herb Conference on your What's On page. We have received a number of enquiries and, we hope, delegates, as a result of this. We really do appreciate it. In your April/May issue, No 138, Lisa Hamilton of 25 Sargent Close, Bonegilla 3693 - who intends settling in Townsville - requested information on permaculture in the tropics. John Weil heads the permaculture group in Townsville and his address is: John Weil, the Permaculture Group, PO Box 5712 MC, Townsville 4810.

**Valda Williams,
Secretary, Herb Society of North Queensland Inc,
PO Box 314, AITKENVALE 4814.**

FEEDBACK LINK-UP FEEDBACK

Dear Megg,

I am a newborn GR reader as 137 was my first. I found it to be most excellent reading and have turned it inside out and upside down with sheer delight. We tried the banana cookies by Liz – fab. The properties for sale are interesting as they give us an insight for the future as we are looking for 100 acres plus for our next project. Touch wood.

The mag is full of hints and knowledge for our future goals and dreams and will, we hope, make things a little easier. This brings me to the soap making recipes; enclosed is a money order for \$5 thank you. Also, do you have shampoo recipes?

I have a query. All through the mag the word WWOOF and/or WWOOFers is mentioned on a regular basis. Please who or what is this? Thank you for an excellent read. Keep up the good work.

Marlene, Troy & Nia,

334 Lt Bowen Drive, BOWEN MOUNTAIN 2753.

For Marlene and others new to the term, WWOOF stands for Willing Workers On Organic Farms. It is a network of organic farmers who host volunteer workers. In return for food and accommodation the volunteers are expected to work for a negotiated number of hours per day. For more information contact: WWOOF, Mt Murrindal Co-operative, Buchan 3885. Ph: 03-5155-0218.

Dear GRs,

Seems to me everyone has an **EARWIG PROBLEM** – I thought they were all in my garden. But I do have a solution; it is ongoing because these little beggers breed worse than rabbits. Put some used cooking oil (even new stuff) in the bottom of a small container (I use an old margarine or yoghurt container) and leave several around where they are doing damage. The earwigs are attracted to the oil, seek it out and fall in; because they are oily they can't climb out and therefore drown. Each two or three days, drain through an old sieve, reuse the oil and discard earwigs. Best to move the containers when you water or it rains.

Another way I find works is to leave a little amount of dog food in a straight-sided bowl around overnight. In the morning, just feed the lot – dog food and earwigs – to the chooks.

I have a request and hope someone can help me. I have all copies of GR except numbers 1–11, 13, 14, 16 and 17. Is there someone out there that can supply these to me? Naturally I will pay.

**Barbara Hayes,
RSD LOCKWOOD 3539.**



Dear GRs,

I am writing in hope that someone can help me. My husband and I recently purchased land at Woodstock and unbeknownst to us the Pastoral Protection board had placed an order on the land to remove the blackberries and rabbits. Now they are saying that they want to control the rabbits with 1080. As we are not farmers and have bought the land to retire to, we need to know what danger this poison poses to wildlife and domestic animals. There are black wallabies, eagles and other wildlife here that we don't want endangered. Also, we have been told that the calicivirus is still active on the rabbits as this was only released within the last two years. I hope someone can send me some information or tell me where I could get it.

Veronica Gee,

PO Box 39, WOODSTOCK 2793.

Veronica, 1080 will definitely kill dogs who pick up even a small dried-up piece of poisoned rabbit carcass. I think it's highly likely to also affect birds of prey. We have also found dead sheep and kangaroos after a 1080 campaign – cause and effect assumed, not proven. Calicivirus has had a much greater impact in drier regions than in moderate to high rainfall areas. – Mary.

Dear Mary & Megg,

For Lloyd Collar: Citronella oil does not come from citrus trees at all, it is from completely another source. It comes from lemon balm and citronella grass, a fragrant grass of southern Asia. Its botanical name is *Cymbopogon nardus*, or *Cymbopogon winterianus*.

Lisa Hamilton: regarding your request on stingless bees. They are very hard to keep in and around the Albury/Wodonga area as it is too cold for them in that area. These bees mainly are found in the north of Sydney and in Queensland. So there is not much hope of getting them to live in your area, at all. Besides, not many beekeepers have them on hand at all, as harvesting the honey is much different to European bees' honeycomb system.

Arthur Ferguson: regarding garlic pickling. Use only freshly grown garlic as the product bought in the shop is treated with chemicals to preserve it. Your problem is the Chinese five spice you used in with your other spices. It's the chemical that has given you this problem and home-grown is much better for your requirements.

Linda Cusworth: regarding little beetles and wasps. To keep your beetles down you plant borders of chrysanthemum and pyrethrum around your garden beds. Camphor bags hung in the garden when sitting outside will also do it. Another method is dilute oil of pennyroyal with lard or grease brushed on the baseboard or in the crevices of the house. Another good spray mixture is quassia chips soaked in warm water.

Wondering whether the Porters from Coomera Qld are still around, have missed hearing from them. Plus also Fiona Field from Bendigo/Lavington area, please contact me. Would like to hear how things are going these days. Robyne & Ray Neal. I lost your address, please contact again at my address or via this rosemede@telstra.easymail.com.au

Colin Law,

2/6 Angus Close, WANTIRNA 3152.

Dear Grass Rooters,

Congrats on such a great magazine, full of useful information, where even the ads are interesting. Once again I would like some help from you wonderful people regarding **RAINWATER TANKS**. I believe there is a valve of some description which allows the initial first fall of rain to be diverted away from the main tank so as not to allow any yucky stuff from the roof into the main tank. Any information regarding this product, such as installation, costs, where it can be obtained, effectiveness etc would be greatly appreciated. I hope to divert the first flush of water into another tank for use on the garden.

Thank you to all those who replied to the query on softening toenails, lots of enjoyment was gained by trying them out. Keep on trying.

Lyn Ballantyne,

89 North Deep Creek Rd, GYMPIE 4570.

Dear GR,

I've seen several requests for help or information in the last few issues and I may be able to help. To those who have written wanting to buy a **HAND-OPERATED SINK-TOP WASHER**: they are available at Great Outdoors Centres. You can ring the Sydney Office on 02-9757-2699 for your nearest stockist.

For Jenny Lacey and Margit of Codamon, a **BEESWAX FURNITURE POLISH**. Heat 1 part beeswax with 4 parts linseed oil until mixed. Cool and add a few drops of lavender oil. To use, rub in with a soft cloth. Leave 30 minutes, then polish with a clean cloth.

Judi Byleveld,

PO Box 291, NANANGO 4615.

Contributors and correspondents who want letters or articles returned are requested to include correct postage.

FEEDBACK LINK-UP FEEDBACK

Dear GRs,

Being the sort of people we are, the following simple tips and remedies should be of interest to readers who, like myself, hate chemicals going into the soil or atmosphere, destroying the good insects and bacteria. The following came from a caring lady in Queensland. Thirty grams of parsley to 600 millilitres water boiled, strained and drunk, will dissolve kidney stones. Parsley is rich in calcium and iron.

Violet and wild violet leaves will dissolve tumours. Dry the leaves, powder them and sprinkle over fruit for breakfast. A tea can be made and drunk. It is known for dissolving tumours in the breast.

A man has claimed that he has eliminated cancer (skin etc), with Sunlight soap. A vet was unable to cure a cancer in the nostril of this man's horse, so he kept dabbing it with softened Sunlight soap and it disappeared and never returned.

This one is my own secret. To stop sandfly and mosquito bites from itching, lather the area with Sunlight soap, then leave it on. Done beforehand, it also prevents the insects from biting. Their bite contains sulphuric acid and the soap neutralises this with its alkali content.

Condys crystals mixed in a bucket of water and sprayed on infected plants will eradicate aphids and mites etc. It also kills ants and is a fertiliser. Just enough condys to change the water colour.

One cup of urine to four and a half litres of water, mixed with some Lux flakes, sprayed on plants affected by grasshoppers, prevents the plants from being stripped of their leaves. It is also a good fertiliser.

A mixture of blood and bone, Epsom salts and sulphate of ammonia keeps soil healthy.

L Perkins,

5 Beecroft St, HUSKISSON 2540.

Thanks for sharing these fascinating tips – can't wait to try out the grasshopper remedy next summer. Always consult a qualified practitioner of the appropriate modality for serious health problems.

Dear Megg,

I would like to ask if anyone is interested in **EXCHANGING SEEDS** – I can't seem to help myself from buying new packets, and as a result have about 50 varieties – from bok choy to zucchini. I'd like to swap these for unusual tomatoes, chillies and almost anything except cucumber (who said a vegetarian had to like every vegetable!!). Please send an SAE and I will send you a complete list, or send a few seeds and I'll send back the same quantity of another veggie.

Fiona,

PO Box 399, EVERTON PARK 4053.

Dear Readers,

Many thanks for the hard work/networking to produce a fantastic magazine. Article of Neville Jackson, 'Sawdust Solution' has been a pleasure to read and a treasure. I have contacts with woodturners, giving free untreated sawdust. This knowledge has come in handy for our quarter acre section.

A hint to parents with baby having **NAPPY RASH**: making sure body is completely dry, sprinkle cornflour over affected area.

Any **RECYCLE JUNKIES** with ideas to use car tyres, please don't hesitate to write. All letters will be answered.

Glenn,

'Rhubarb Farm', 29 London St, RICHMOND, CHRISTCHURCH, NZ.

Please keep letters brief, clearly written and relevant to self-sufficiency topics. Letters pushing barrows (religious, political or other) will not be published.

Dear GR & Readers,

In GR138, Megan Cooke wrote in response to Margit's 'Aromatherapy Burner Treat', saying that she has bad reactions to essential oils being burned, and expressing worries about the possible fire dangers of the candles used. I would like to attempt to clear up these issues as best as I can, as a student of **MAS-SAGE/AROMATHERAPY**.

First of all, the dosage of essential in the 'treat' is far too much, at 21 drops in total. It is recommended that we use, in general, three to five drops in the burner (if total), possibly up to ten drops, but one drop can be enough for sensitive people such as children and the elderly. If too much is used, reactions such as nausea, headaches, or loss of balance can occur, especially if the room is small and/or poorly ventilated.

Generally, if you don't like the smell of an oil, then it is not right for you at that particular time, or you are possibly allergic to it. If you think you are allergic to an oil/s, get a skin patch test done by an aromatherapist and discuss other oils that are more appropriate for you. Don't just write off all essential oils because you have had a negative reaction to a few oils! Used properly, they can have positive effects on mind, body and soul.

To make burning essential oils as safe as possible in regard to fire, electric oil burners are available, which are very safe and cheap to run. If you like candles, use a burner that encloses the candle, keep the burner away from curtains etc and children, and don't let it burn dry. Keep the bottles away from the burner as essential oils are highly flammable. Use beeswax or palm oil tea light candles, as paraffin oil candles can be irritating to some people (me included).

Essential oil quality is also very important. The purest oils are the more expensive ones unfortunately, and, as the saying goes, you get what you pay for. Quality oil companies will provide you with the botanical name, part of plant used, extraction method and country of origin. I hope this information makes things a bit clearer. If anyone has any further questions, I am happy to answer them, or find out for you.

Alicia Rookes,

6 Azilemot Ave, HERNE HILL (GEELONG) 3218.

Dear Grass Roots,

I am a seventeen year old from sunny north Queensland and since discovering your magazine a while ago I have become extremely interested in self-sufficiency and the likes. Hopefully, when I leave home I will have enough knowhow to begin the GR lifestyle immediately. I was hoping to be a **WWOOFER** after I finish school. However, the reason I am writing is to ask if anyone has recipes for **NATURAL PEST REPELLENTS**. We have a real problem with grasshoppers up here, especially in summer. I was also wondering how to make my own incense sticks. It is quite expensive to buy nice smelling ones in any quantity. Thanks for a great magazine.

Erin Bell,

PO Box 32, MT MOLLOY 4871.

See L Perkins's letter this issue for a great grasshopper hint. Also see GRs 76, 108 & 109, for garden pest control measures.



Dear Megg,

Ron Green thanks all those kindly people who wrote to him regarding his loss of taste and smell. Actually, it wasn't me but my son-in-law. He has just undergone a successful operation but will take some time to recover. All your letters have been passed on to him. He is anxious to recover what one correspondent wrote of as his 'joie de vivre'.

Ron Green.

FEEDBACK LINK-UP FEEDBACK

Dear GR & Readers,

My sincere thanks to the many people who answered my cry for help nearly two years ago. I hope you all received my letters with postage enclosed. Two who wouldn't have were someone from George St, St Kilda (no name) and Gracie from Dubbo (no address). I would happily send postage if I had the required details. Gracie, I would love to write to you and answer your two letters to me if you would send your address. I still have **SHINGLES** after giving all 16 of the remedies a fair trial. I still have to try the colloidal silver one, but am using aloe vera gel which is good, but not curing the shingles.

For **MIGRAINE HEADACHES**, mix 1 tablespoon of glucose D, juice of 1 lemon, 1/2 glass of water, 1/4 teaspoon of bi-carbonate of soda. This fizzes up, so mix in a large glass. Always mix and drink as soon as you know you are getting a migraine. Take this mixture each time for three months, or until the headaches stop. I suffered badly with migraine for some years and then my mother sent this recipe which one of my aunts had given her. I have now been free of migraines and ordinary headaches for 34 years.

Shirl Williamson,

360 Modella Rd, LONGWARRY 3816.

Shirl, the winter 2000 issue of 'New Vegetarian and Natural Health' has an article about shingles. The main advice seems to be for total rest and a water & juice cleansing diet. There is a 'soft option' and also advice on pain relief.

Dear Grass Roots,

Thank you for printing my article about the Indian-Pacific train trip (GR138). I enjoyed writing it and I hope some people enjoyed reading it. I have several other brief articles not really suitable for publication, but which may be of interest to some readers. There is no cost involved. All they need do is drop me a line and I will send them a list of available material.

Bruce Dunne,

No 1 South Parade, BLACKALLS PARK 2283.

Dear GRs,

Since our first letter to GR we have had several requests for my **ADVOCAT RECIPE**, so here it is, along with Paula's favourite tomato relish recipe.

Advocaat

- 10 eggs
- 1/2 tsp salt
- 1 1/4 cups sugar
- 2 cup vodka
- 1 1/2 tsp vanilla

Beat eggs with salt and sugar till creamy. Add vodka slowly, beating constantly. Pour into double boiler (or bowl over pan) under low heat. Whisk until warm and thickened. Remove from heat, stir in vanilla. Bottle.

Tomato/Onion Relish

- 6 tomatoes, peeled/chopped
- 2 onions, chopped
- 2 apples, peeled/chopped
- 1 tsp salt
- 1 tsp grated lemon rind
- 1 tsp dried mustard
- 1 tsp garam masala
- 2 tbsp mild curry powder
- 1 1/4 cups brown sugar
- 1/2 cup white vinegar
- 1/4 cup lemon juice
- 1 tbsp tomato paste

Combine all ingredients. Simmer, uncovered, 30 minutes (or until thick). Pour into hot, sterilised jars - seal. Makes four cups.

Clare & Paula Colins,

'Frogsong', PO Box 402, NANANGO 4615.

Dear Readers,

Hello from Armidale, NSW. In the last issue of GR, Arthur Ferguson wanted advice re **PICKLED GARLIC**. When I lived in Queensland I also purchased vast amounts of fresh garlic cheaply (from China) at the Big Orange between Ipswich and Toowoomba. With no time to do anything with these amounts of garlic, I put them all in the freezer. Some months later (as I'd had to move in six weeks time) took them all outside whilst still frozen. The papery skin peeled off easily and I was left with frozen garlic cloves. Next I put handfuls of frozen cloves into my blender with enough pure olive oil to make a roughly chopped garlic in plenty of oil. Put in clear sterilised jars. Presto, still eating the first jar! (That was done Sept '99.) Gave away a few jars and still have some! The garlic does go a darker yellow, but it's still OK for eating, cooking etc. (Do this project outside - the smell!!!)



On the **SUBJECT OF HORSES** (again), I forgot to mention with horses' running eyes and squinting in sunlight, I mentioned the eye disease uveitis. In summer months they should wear a mesh veil (not a string veil) to shade. Also, to clear up the discharge, two crushed aspirins (not Disprin or Panadol) in the feed morning and night until cleared.

A cheap way to extend a horse's undercover wool/material blanket when it's getting thin or holes appear is to use a large patch of wool remnant (from op shop of course!). Spray adhesive glue on patch, place over washed clean underblanket, then iron over the patch onto the horse blanket so the heat adheres the patch to the blanket. I then sew around the patch and zigzag over it all for strength. Only do this if buckles and straps are still in good order, but it certainly adds layers (and warmth) to the blanket and saves buying a new one. I have found also that the outer canvas horse covers don't have good sealer to repel rain (I've bought a few, and expensive ones). Here is an alternative: I melted leftover candles in an old fruit tin on the stove and added olive oil (just a bit), then painted the horse covers. It dries all thick and waxy but penetrates well and really seals. The last lot of sealer I bought cost me \$30 for one cover! I found horse covers in NZ cheaper and better made and with higher quality leather straps and heavy duty buckles.

Lastly, a favour to ask: I'm looking for a plan to build a **DIAPHRAM PUMP**. Also, I lost a man's address who has a bio-dynamic farm in Glen Innes NSW (his son made one for his school project), and maybe he would make one for me (pay of course). Best of everything to everyone everywhere.

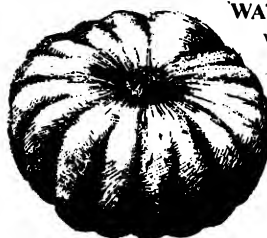
PS. NZ address for horse covers: NZ Covers and Saddlery, 1/15 Silverfield Industrial Estate, Takapuna, Auckland NZ - 09-4448342. They will send you a catalogue.

Alexandria,

PO Box 1002, ARMIDALE 2350.

Dear GRs,

Thank you to all those lovely people who replied to my letter about **GROWING PEPINOS** last year. They are now growing well, even after being accidentally slashed with the long grass. I have now built a house on my two acres and absolutely cannot believe what a difference environment can make to health. It is so peaceful here surrounded by wheat paddocks instead of cars racing up and down the street. My query this time is a concern about using the **RI-TREAT WASTE WATER TREATMENT** system for growing vegetables using recycled grey water. At present I have grown enormous Queensland Blue, Jap pumpkins and honey dew and they all taste delicious. But are they safe to eat? I would appreciate any comments.



Raylene Fiorita,

PO Box 301, SMITHFIELD 5114.

FEEDBACK LINK-UP FEEDBACK

Dear GR & Readers,

This is the first time I have written although I have been reading your wonderful magazine on and off since I was 16. I am now 22 and my partner and I are discovering that there is more to life than just working and buying more possessions. I quit my job about six months ago after a huge amount of stress and sickness associated with it. It was the best thing I have ever done and I think I deserved the break. I am looking for work again, but now realise that if it's not the best paying job in the world, it doesn't matter, as long as I am happy doing it.

Eventually, we hope to get out of mainstream society and maybe go travelling and do things we have always wanted. We have always been high achievers and at the age of 21 had already bought a new house. We know now that we probably should have waited and done other things first before we made a commitment. It's not that we can't afford to pay it off, it's just that we are yearning to get back to basics. We are interested in hearing from people who can **GIVE US SOME ADVICE**. Do we rent our house out and buy an old house and some acres and do it up and live off the land, or do we sell completely and go travelling around Australia on no money, but willing to work our way around?

We have gone through some major changes in our lives since I quit work. Our TV blew up weeks ago and we have decided not to buy another one, and believe it or not we are happier without it. We have realised that TV is really one of the most negative things around, and we are now finding we have all this extra time to do things!! We also read a book called *Sacred Space and Feng Shui*, by Karenn Kingston. I highly recommend it to everyone. We did a huge cleanup after we read it and are finally 'letting go of the past', which you don't realise holds you back so much.

We are also wanting to hear from vegans and vegetarians with some advice and some yummy recipes and we have decided to make the switch. Although we are finding it easy not to eat red meat, chicken seems to be another matter, but we are trying our best and determined to succeed! Can anyone tell me, is it possible to live on your own income generated from a home business like selling things you make, grow etc? Has anyone had any success using the internet for home business?

Also, we are thinking of getting a futon mattress (the genuine kind) and are interested in hearing if you recommend it to us (we have both suffered back problems etc). Does anyone know what to do with a tobacco plant when it flowers and goes absolutely huge and you don't smoke? I hear you can use it on your garden somehow, but am not sure what the go is there. Geez, I could go on forever but I think I better leave it at that for now and leave something to write next time. Hope to hear from some people soon and look forward to it!

Cherie & Troy,

12 Avondale Place, LITTLE MOUNTAIN 4551.

You have some exciting choices ahead of you. If you are able to rent your house out for an amount equivalent to your mortgage repayments, why not do that and travel. This way, you are not burning your bridges, and still have the opportunity to see and learn, and the space and time to make decisions about the future. Good luck whichever way you go. Keep in touch.

Dear GR Readers,

For the last six years I have grown **SCARLET RUNNER BEANS** (also known as seven year beans because they produce an underground tuber which sprouts each year). They do well in cooler climates where they grow up to four metres tall, produce masses of beautiful scarlet flowers and many edible bean pods. If any reader would like five seeds, send a stamped, self-addressed business size envelope, up to December, to:

Don Burgess,

17 Chivers Close, LITHGOW 2790.

Dear Grass Roots,

We hope that readers can help us. We require information on **INSULATION**. As we have some sheep, we would like to use wool. Can we just wash it and then pack it in the walls? Or does it need something else done to it? Also, could an insecticide and/or a fungicide be sprinkled into and around it? What types are best for this?

Do any readers have any **GIANT RUSSIAN SUNFLOWER** seeds that I can buy?

Brenda Porter,

RMB 737 NARROGIN 6312.

Dear Megg & Mary,

I am writing to thank you for putting the **TICK CONTROL UPDATE** in GR132, giving my new phone number. I have had about 400 calls from all over Australia about this treatment to try to control cattle ticks. I am sure it prevents other ticks as well. My Blue Heeler did not have ticks and when she got a very dry itchy skin I put her on Alroc and that stopped as well.

However, I could not control the buffalo flies and they got so bad I have now taken my two cattle back to 'Rocky Glen', my son's property in NSW, near Inverell. There are no ticks or flies there.

The two DPI inspectors at Wallangarra on the border want more information about Alroc treatment for tick control. This is very encouraging as they are the only official people to show any interest in this method.

Jo Cutlack,

128 Larch Rd, TAMBORINE 4270.

Dear GR,

A number of people have enquired about **HOME EDUCATION**. I'd like to recommend Gaia Grant's book *The Rhythm of Life*. Doubleday, 1998.

MC,

16 Rose Pde 2519.

Dear Editors,

Two readers have requested a recipe for **BEESWAX FURNITURE POLISH**, and I have just the right one for them. This recipe was given to all buyers of the De Castella Spinning Wheel, which was a beautiful, hand-turned model of Tasmanian blackwood. He naturally wanted us to keep his wheel in perfect order. I have lost sight of him for several years, but his wheels spin on to perfection!

Heat 500 millilitres raw linseed, do not boil. Melt 50 grams beeswax. Take away from flame. Stir in linseed. Add 500 millilitres pure turpentine. Stir well and place in tin container. Shake before use. Makes 1 litre.

Ada,

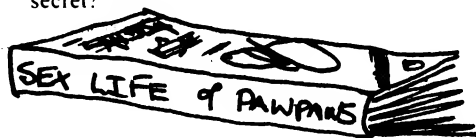
LEONGATHA.

Dear Megg & Mary,

I was very interested in the article 'Successful Pawpaw Growing' in GR137, Feb/Mar 2000, and would love to know how Gisela McIntyre is able to produce **PAWPAW PLANTS OF BOTH SEXES**. Here on the Gold Coast, if I just sow pawpaw seeds out in my garden, without any of the special procedures that Gisela takes, they become very healthy pawpaw plants. This climate is so conducive to the growing of these plants, they will self-sow from seeds. However, one problem remains... How can I propagate female pawpaw plants? All I can grow here are males. In fact, I have become so sick and tired of being unsuccessful; I have planted two bisexual plants. Please tell me what is the secret?

Tom Fletcher,

**75 Avocado St,
ELANORA 4221.**



FEEDBACK LINK-UP FEEDBACK

Dear Grass Roots,

Although a city dweller in a hostel, I love reading GR, and the thought occurred to me that a kind reader might be able to help with **A RUG PATTERN**. It looks like a honeycomb and is made up of crochet circles about the size of 50 cent pieces which look as if sewn together, but I believe it is made in one piece.

I would love to make one before gout and arthritis completely take over my hands. I do many handicrafts for charity but love doing rugs. Will pay postage.

Marion Elliott,
6 Coast Ave, CRONULLA 2230.

Hi Grass Roots,

No 139, page 11 is a bomb waiting to go off. Clips should never be used in a **BATTERY INSTALLATION**; one spark and acid fumes could explode, even in a car situation. Consider the legals: printing such a photo if someone had an accident after duplicating such a set-up. As a very long-time reader of GR, I mean to be very positive not negative.

Les Lolli,
291 Martyn Rd, BAUPLE 4650.

Dear GR,

Thanks for an interesting and useful mag. My husband Rob and I have been living on our property of 150 acres in Ripely, Qld for about four years now. We have beef cattle and acquired a Jersey cow two years ago from neighbours. I'm interested in making butter and cheese from surplus milk. If anyone could help in the cheese department I'd appreciate it. I remember in a 1980s *Grass Roots* there was a simple recipe for hard cheese, but I can't seem to find it.

Also we have a cock and three peahens. My husband likes them, but unfortunately I don't, as we have rainwater tanks and they jump and poo on the roof. Isn't this unhygienic? Waiting for replies, thank you.

Heli Bassingthwaighte,
PO Box 550, BOOVAL 4304.

Cheese making instructions have been in GRs 83, 90 and 98.

Dear GRs,

My partner and I have recently moved to an isolated **ABORIGINAL COMMUNITY** in the Pilbara where I am a teacher and Rob does every job under the sun (literally!). It is an incredible and interesting lifestyle for anyone keen enough to change their learning curve to a vertical level. I am sure I am learning a lot more than I could possibly teach my students!

We are currently in the process of establishing our own garden, as fresh, healthy vegetables are expensive and hard to come by here. I was wondering if anyone has a recipe for, or knows how to **PRESERVE PEELED TOMATOES**, such as those used for pasta sauces. I seem to buy hundreds of tins of tomatoes and would much prefer to use our own.

I am also interested in making my own pasta, but can't find a **PASTA 'PRESS'** or hand-wound gadget anywhere. Does anyone know where I might buy (mail order or otherwise) one?

Rob and I love your magazine, courtesy of a gift subscription from my parents in New England, NSW who are avid long-time readers. We hope to pursue our own GR lifestyle and achieve some degree of self-sufficiency in the near future. If anyone knows of land for sale in northern NSW or southern Qld, upwards of 500 acres with permanent water and plenty of trees we would be extremely interested in negotiating seller finance terms. Thanks for helping me believe our dreams can one day be realised. You can write or email me at: dusty-rob@yahoo.com.au

Dusty Worley,
PO Box 188, PORT HEDLAND 6721.

Anonymous letters will not be published. Please indicate if you would like personal details to be withheld.

Dear Grass Rooters,

We've enjoyed your magazine for a few years, especially learning of others' experiences, stories and wisdom in the Feedback section. Now it's time to see if any of you have any experiences that may enlighten us on something we are presently contemplating. We've just read JC Jenkins's book, *The Humanure Handbook*, and are very inspired by his ideas – the logical simplicity of thermophilically **COMPOSTING OUR HUMANURE** to return it to the soil, saving precious water, killing pathogens and feeding our plants. But, some questions. Have any GRs tried to have such a system (sawdust bucket toilet) approved by a council for building? What have been your experiences? And secondly, as the system uses fresh green sawdust to build into the compost pile, has anyone any thoughts on how the antiseptic/antibiotic characteristics of certain Australian trees may affect the activity of the thermophilic bacteria? The writer of the book, who is American, advises against using certain American timbers which also have these effects, but there's no information in the book as to Australian trees (eucalyptus, tea tree etc). I wonder what local timbers would be most suitable.

Any thoughts or experiences in this area would be greatly appreciated. And a big thank you to the GR team and all the readers for creating such an inspiring and often entertaining magazine! Fantastic! Thank you!

Catherine Ryan & Daydd Kelly,
RSM Tarilta Rd, VAUGHAN 3451.



Dear Fellow GR Readers,

Do you not have an oven to **BAKE CAKES** etc? Recently I came upon a recipe for steamed nutloaves: 3 cups All Bran or other brans. 1½ cups sugar. Mix in a large bowl 3 cups milk and 2 tbsp Golden Syrup. Heat some of the milk and dissolve Golden Syrup. Add all to bran mix and stand for 12 hours. Sift twice 3 cups plain flour and 3 tsp bicarb soda, add to bran etc. Mix well. Add 1½ cups dried fruit and ¼ cup walnuts. Half-fill four well greased baked bean tins, cover with foil tied with string. Place in boiler with 5 cm boiling water. Steam 1½ hours (add more boiling water to keep to 5 cm). Remove foil and cool in tins. I see no reason why boiled fruit cakes or plain cakes could not be cooked in this manner. I plan to collect more tins and have a go. How good it is that the hot weather is gone. I'm definitely not a summer person! My best wishes to GR staff and readers.

Marje Bates,
DANDENONG.

Dear Editors,

My husband and I have a farm where I nightly feed several possums. The possums have both natural sites and some provided by us, to shelter in.

Some time ago we had a problem of being awoken by **POS-SUMS IN OUR ROOF**. After frequent searching, we eventually found their extremely narrow entry site and that they were sleeping in the very narrow gap between our iron verandah roof and the lining under it.

My husband blocked up the hole during the night. However, a few days later we heard desperate gnawing and saw sawdust which had fallen through a narrow seam. Upon lifting up a sheet of roofing iron he found he'd inadvertently imprisoned the poor possum! Apparently, possums return to check out their homesite at least once during the night. After removing this possum we've had no more trouble.

It may be a help to readers to know that both possums and bats can be discouraged by providing perpetual daylight by putting a light in their sleeping area!

Audrey & Ron Sampson,
MS 396 NANANGO 4615.

FEEDBACK LINK-UP FEEDBACK

Dear GR,

I have lived in your wonderful country for 17 years, in Darwin, Townsville, Brisbane and Warwick (south-east Queensland). Being a **CARPENTER-JOINER** by trade, I have often noticed a definite lack of kitchens, either locally built or none at all in owner-built houses. If there is enough interest out there, I will set up a business, with permanent advertisement in GR, whereby you can send me your basic requirements, a sketch with measurements. I will then post you back a simple-to-follow plan, cutting list, and step-by-step instructions. The finished kitchen with timber top, doors, and tile splashback will look stunning without a second mortgage. If interested please write with SAE.

Geoff Dalgleish,

C/- Post Shop, WHANGAMATA, NEW ZEALAND.

Dear Grass Roots,

I recently bought a copy of GR, hoping to find a way to use my time more usefully. I am very open to suggestions, as I am totally 'lost'. I live in a rented part of an old house and cannot go in for sustainable living in a big way! Money isn't just scarce, it is almost nonexistent, so buying into a multiple occupancy is not feasible. Practical I am not, but, time I have by the bucket load. I am over 60, and in reasonable physical health, do not have a very good education. Any type of job seems totally unobtainable, due to lack of opportunities and shortage of funds to allow a move to where work is situated. So, I would like to use my time and my limited computer skills to keep me from going 'barmier'.

Personal replies are welcome – there is even an email address or two: baroque@synergy.aunz &/or baroque@visto.com

Bill(y) Kitson,

Flat 2, 117 Canterbury St, CASINO 2480.

Dear GR & Readers,

Thanks for all the marvellous articles. I've had so much help and inspiration from them and am putting them into practice on our just-purchased beautiful 30 acres at Wyangala Dam near Cowra in NSW. We have purchased a **SECOND-HAND COPPER SOLAR HOT WATER HEATER**, but the glass was broken long ago. To replace would cost in the vicinity of \$400. The glass sheets are large – 1800 mm x 2020 mm – and they would be impossible for us to transport on a box trailer and therefore a fitter would have to come 30 kilometres from town (not cheap). Perspex would be very similar in price. Glass is also a concern as we suffer from severe frosts. Does anyone have any enlightened suggestions? Economy is a very real concern, though not at the cost of efficiency of course. We plan to use a combination of solar and combustion stove water heating.

J Libius,

2/37 Queen St, WOOLLAHRA 2025.

Hello All,

Wondering if there is a reliable couple who would enjoy taking over from me in the **MANAGING OF SNUG BEACH CABIN & CARAVAN PARK** approximately October of this year? It really needs a handy-type male on the premises as well as a female and I am not prepared to be with a man in my life. Or is there a very handyman who would like to live rent free in separate accommodation and help with the odd things which need repair and/or tending to in a situation such as this? Someone who has their own camper or van would be good. I am enjoying working here now I have learned the ropes, but can't have a life, as I am on my own and need someone to relieve me. I love Tassie and would not live anywhere else now and Snug is a great place in the popular Channel Country, not far from Hobart.

Also want a plan for making a clay/outdoor type oven for baking bread and a recipe for dung floor.

**Snug Beach Cabin & Van Park,
16 Beach Rd, SNUG 7054.**

GR124 contained instructions for making a dung floor.

Dear GR Readers,

Does anyone have a picture or a pattern of a **CARPET BAG**? I'd like to make one. I'd be happy to send some stamps for postage etc. I'm not interested in pumpkin bags. I'd like to make a genuine carpet bag. I'd also like a pattern for a big hair net if anyone has one. It's rather like a fish net bag to hold long hair. They were popular in the '30s and '40s I think.

Thank you to all those people who wrote to me re hair color (natural). I think I answered everyone. I had a lot of requests for information received. I wouldn't recommend henna. It's like mud! In hindsight, I realise the sun was damaging my hair. I'd like to pass on a conditioner I made up myself prior to receiving any answers. It's good: 20 drops of 100 percent pure rosemary oil, 1 dessertspoon glycerine, 1 dessertspoon coconut oil, 500 ml rain-water. Put all into a household spray bottle and shake well, even when you're using it between sprays. It will wet your hair of course, so don't put it on five minutes before you go out. Hats are a pain in the neck in the garden I find, so now I use a mop cap I made years ago, or a pioneer bonnet. Those of us who wear glasses look a bit like the grandma in the Little Red Riding Hood story in these head covers, but they stay on while hanging out the washing too. Cover your hair girls, the sun will damage it.

'The Bag Lady',

36 Martin Cres, BENARKIN 4306.

Dear Grass Roots Readers,

Here I am again seeking help from this wonderful magazine. I am looking for an old publication of *Painless Patchwork*, by Rosemary Donoughue. If any one knows where I can obtain one or has one to sell I will be pleased to hear from you. Many thanks and good wishes to all.

Michele Maher,

7 Linaria Circuit, DREWVALE 4116.

Dear Megg & all at GR,

I am writing for help regarding my grandson Lachlan who is just 19 months old. He was born three months premature and although reasonably well he has some problems. The main one at the moment that we need help with is **BELLS PALSY** on the left side of his face. It causes problems with his speech and drinking. We have been told that if it has not improved by the time he is two it will always be there. We have tried massage with oils in massage cream, but so far it is the same. He also has cross eyes and had an operation in March, but the doctor found he had virtually no muscle in the right eye and the left eye is only marginally better. He is a happy little soul, but it would be lovely if only we could do something more for him. He is not keen on walking, but will try if one holds his hands. Is there anything we can do to help him along? He goes to the early intervention program and they have been terrific. Hoping someone can help.

I have been reading *Grass Roots* for some years now and have found lots there that has helped me before. Much as I would like to live on a small farm I know that I would not be able to manage, age and different illnesses prevent that. Instead I live in a small country community with my daughter and granddaughter, close to the beach and not too far from all we need.

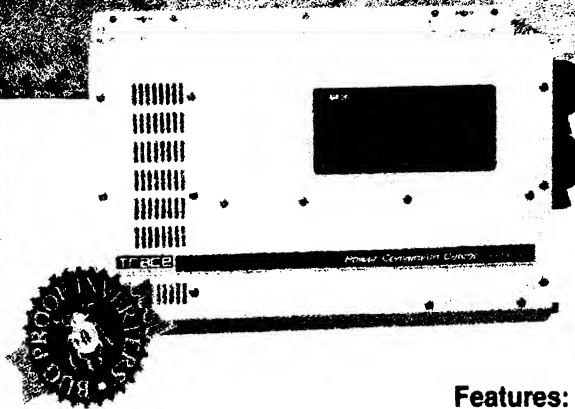
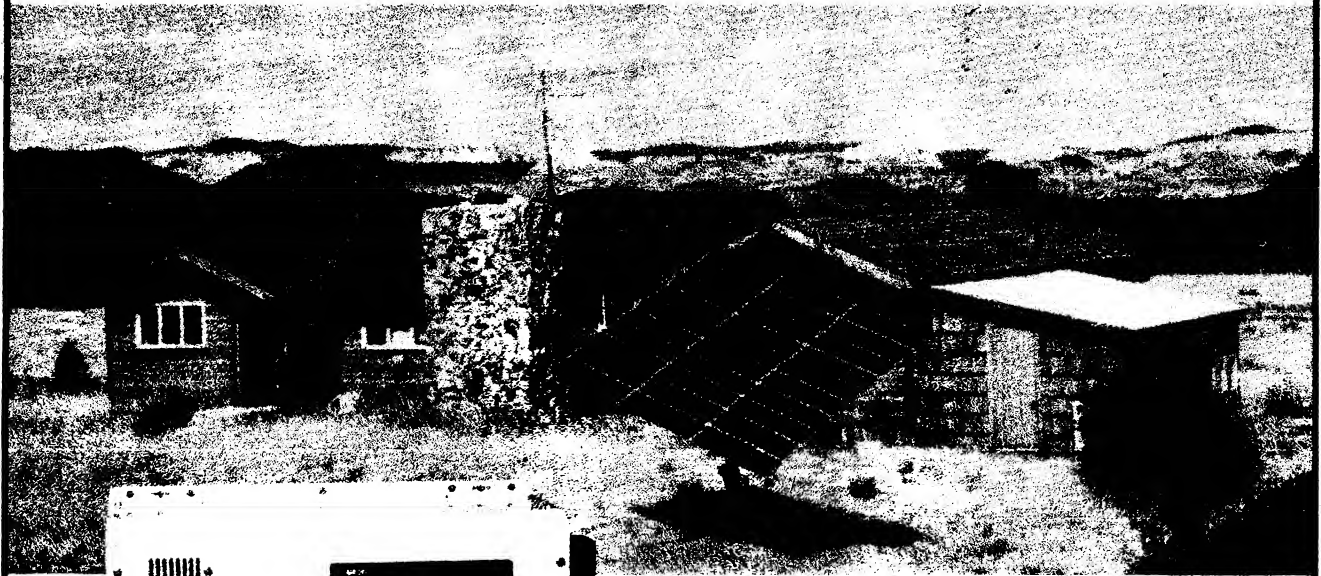
Thank you very much for such a great magazine and all the helping people who also read GR.

Audrey McCurdy

**46 Diamond Head Drive,
SANDY BEACH 2456.**

Please keep letters brief, clearly written and relevant to self-sufficiency topics. Letters pushing barrows (religious, political or other) will not be published.

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STYLISH SLIPPERS

by Elsie Hoare, Berwick, Vic.

I found these slippers with a knitted top and sheepskin soles fun to make and quick to knit up. They would make an ideal gift or market stall item. They are knitted on two needles and seamed with a flat seam down the centre back. I knitted a fancy cabled rib for the larger size and worked the pattern in Fair Isle, but if you prefer it the rib can be simple knit one, purl one, and the directions for Fair Isle may be ignored, with the slipper knitted in plain fabric then embroidered over with either duplicate knitting stitch or cruel embroidery at a later date.

MATERIALS

For the small size with a sole measuring 14 cm allow:

- 1 x 50 g ball of wool, 8 ply equivalent, in main colour, plus about half a ball of contrasting colour for Fair Isle
- a pair of size 4 mm (old size 8) knitting needles, or the size necessary to produce 22 stitches over 10 cm
- sheepskin or thick felt large enough to cut soles
- strong thread for attaching soles to slipper

For the larger size with a sole measuring 26 cm allow:

- 2 x 50 g balls of wool, 8 ply equivalent, in main colour, plus oddments in contrast for Fair Isle, totalling about one ball
- needles as for the small size
- slipper soles in either sheepskin or heavy felt
- strong thread or leather thonging to attach soles – I used leather thongs.

PATTERN

If you are making your own soles, trace around the foot onto a piece of paper. In the case of a baby, trace the sole of a well fitting shoe. Tracing the foot of a wriggling one-year-old is just about impossible. If you are prepared to risk waking the baby, you might try it when he/she is asleep, but tracing the shoe worked for me.

So that the slippers can be worn on either foot, even up the shape of the



The Fair Isle pattern is optional on these smart slipper/socks. You can devise your own decorative touches, or leave them unadorned.

sole so that it is neither right nor left. Cut out the paper pattern when you are satisfied with it, allowing half a centimetre all round for the seam, and use it to trace the shape of the sole onto the wrong (skin) side of the sheepskin or felt. Cut the soles out with sharp scissors or a sharp knife.

Keep the soles or the pattern on hand so that you can measure your knitting against them when you need to.

KNITTING

Ankle Ribbing

Directions for larger foot in brackets (). Using main colour cast on 30 (54) stitches.

Work in rib for 8 cm. Join in contrast and work chosen pattern for 2 cm (both sizes). Break off contrast.

Divide for Heel

To avoid confusion, the heel area is better knitted without pattern.

Using main colour knit 6 (9). Turn work.

Purl 6 (9).

Continue on these 6 (9) stitches, knitting forth and back until the heel piece measures 4 (6) cm, ending with a

purl row. **Note:** You will not need an extra needle to do this, just keep knitting with the main stitches out of action for a while until this small heel piece is finished.

With right side of work facing, cast off 5 (8) stitches. One stitch is left on the right-hand needle.

Heel Gusset

With this one remaining stitch on the needle and right side of work facing, pick up 7 (11) stitches along the left side of the heel piece. A total of 8 (12) stitches on right-hand needle.

Now return to the main knitting which has been waiting on the left-hand needle and with the 8 (12) stitches still on the right-hand needle continue knitting across the main stitches to the end of the row. You should have 32 (57) stitches on the needle.

Next row: Purl 6 (9). Turn work. Knit 6 (9). Turn work. Continue knitting forth and back on these 6 (9) stitches until this heel piece measures the same length as the first, ending with a purl row.

Next row: With right side of work facing, cast off these 6 (9) stitches and

break off the wool.

Return to the base of the heel piece you have just completed, where the main body of the slipper is waiting on the right-hand needle. Rejoin main colour yarn and pick up 8 (12) stitches along the right-hand edge of the heel piece, stopping where the cast-off edge begins.

You should now have 34 (60) stitches on the needle, being those down the edge of the first heel piece, along the main part of the slipper and up the side of the second heel piece. Turn work.

Next row: Purl all stitches.

To Decrease Heel Gusset

Using main colour, knit 7 (11), knit 2 together, knit 16 (34) to the last 9 (13) stitches. Knit 2 tog through the back of the stitches. Knit 7 (11).

Next row: Purl using main colour.

Next row: Knit 6 (10) main colour. Knit 2 tog. Join in contrast and work the next 16 (34) stitches in pattern to the last 8 (12) stitches. Drop contrast. Using main colour, knit 2 tog through backs of stitches, knit remaining 6 (10) stitches.

Next row: Purl 7 (11) in main colour. Pattern to the last 7 (11), knit these remaining stitches in main colour.

Next row: Knit 5 (9) main colour. Knit 2 tog. Pattern to the last 7 (11). Knit 2 tog through back of stitch, in main colour, knit remaining 5 (9) main colour.

Continue in this way, decreasing the gusset by one stitch on each plain row. Keep the centre panel straight. When all stitches of the gusset have been worked off and you are left with only the centre stitches, 18 for the small size 36 for the large size, decrease one stitch at each end of the row in the large size only, (34) stitches.

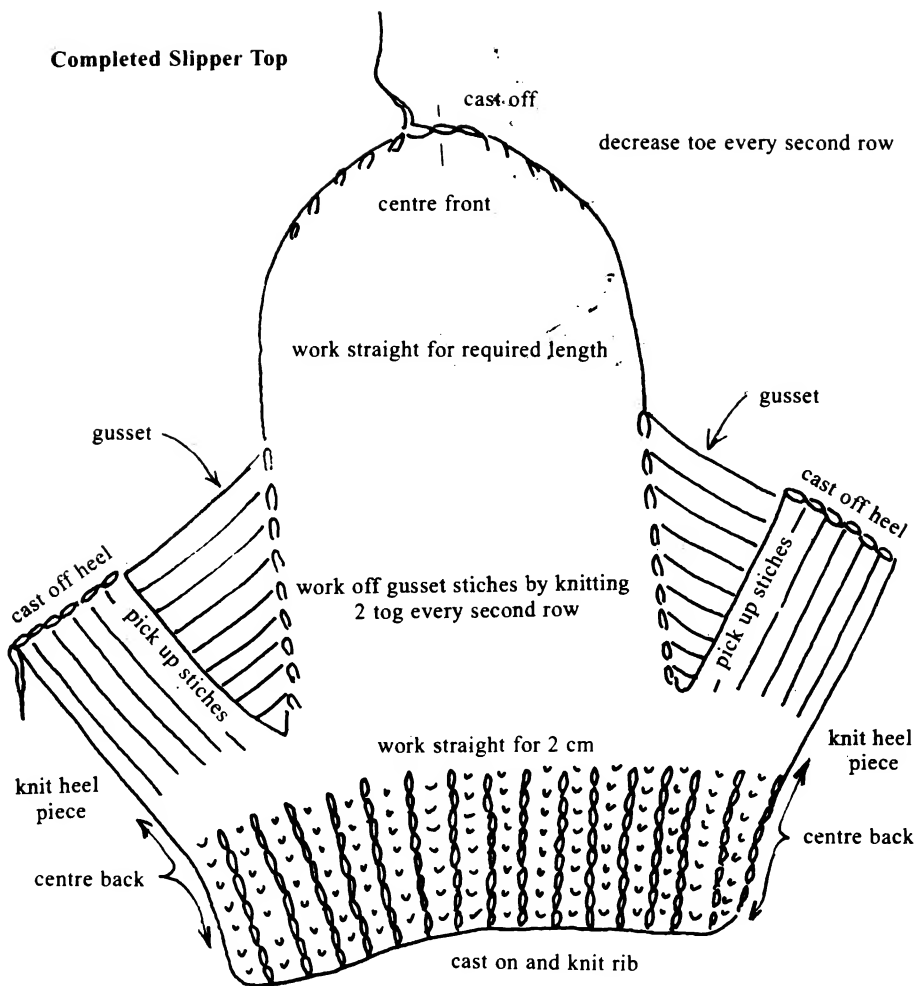
Continue knitting the centre part of the slipper for another 4½ (8) cm, finishing on a purl row.

Note: This is the time to adjust the fitting if you want a different size. Try the slipper on the foot or measure it against the prepared sole, by working to the centre of a row and folding the work in half lengthwise. Lay the work along the sole, matching centre backs. The final shaping for the toe takes about 2 (5) cm.

To Shape The Toe

With right side facing, work 2 tog at each end of every row until there are 6

Completed Slipper Top



(10) stitches left.

Next row: Knit 2 tog. Cast off with this stitch and continue casting off until 2 stitches remain. Knit these 2 tog and finish off. This gives a rounded edge to the cast-off row, making a nicer fit for the toe.

To Make Up

Join centre back with a flat seam. Darn away all loose ends. Matching heel and toe centres and keeping the seam to the outside, oversew the slipper to the sole with the woolly side in. The sole edge of the knitting should fit smoothly round the edge of the sole without stretching. Ease any fullness to the toe area.

For the small size use a sharp needle and strong thread. Use the thread double and work two stitches into each hole for extra strength and an attractive appearance.

For the large size mark the skin side of the soles with dots ½ cm in from the edge and about 7 mm apart. Punch these with holes using a small-holed leather punch suitable for your leather thongs. Lace the soles in place using

an over-edge lacing stitch. Take care to finish off the lacing by darning the leather thonging away beneath the laced stitches until it is secure enough to stay put.

Embroider the slippers as desired. A crocheted or twisted cord can be threaded through the knitting at the ankle if you feel that the slippers need it. I found it unnecessary on those I made as they stay on the feet very well.

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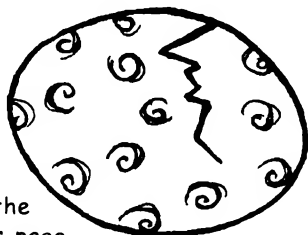
Dinosaurs

Dinosaurs are reptiles that first appeared on earth about 225 million years ago during what is known as the Triassic period of history. For 160 million years they were the largest, strongest and fastest animals in the world. There were many different types - some meat-eaters, some plant-eaters, some ran very fast, some had horns and spikes and so on. All dinosaurs became extinct about 66 million years ago at the end of the Cretaceous period - except for some feathered ones that evolved into birds. It is believed they died out after a giant meteorite hit earth, making it impossible for many creatures to survive in the cold, dark aftermath. Here are some fun ways to explore the world of dinosaurs.

Make A Dinosaur Egg - It Hatches!

You will need

- ★ a small piece of stiff cardboard
- ★ a balloon
- ★ old newspapers
- ★ 1 cup of flour
- ★ water
- ★ paints or pencils
- ★ PVA glue



Trace or copy one of the dinosaur images from this page onto the piece of cardboard. Cut it out and colour it with paints or pencils. To make it a shiny dinosaur, coat it with PVA glue. Leave to dry.

Make up a bowl of glue by mixing to a paste 1 cup of flour with 1 cup of water in a saucepan. With the help of an adult, stir in about 4 cups of boiling water and simmer on a hotplate for a few minutes to make a good workable consistency. Allow to cool.

Tear up a pile of old newspaper into bits about 3 cm by 3 cm.

Place the tiny cardboard dinosaur inside the balloon and then blow up the balloon.

Dip each bit of newspaper into the glue and cover the balloon (overlapping slightly as you go). Cover with at least two layers, allowing the egg to dry overnight after each layer.

When the egg is completely dry, pop and remove the balloon and decorate your dinosaur egg however you imagine they might have looked (nobody really knows).

Your baby dinosaur can hatch whenever you like.



BOOK REVIEW

Prehistoric World

by Fiona Chandler, Sam Taplin
& Jane Bingham

Dinosaurs and things prehistoric fascinate many children (and grown-ups!). This book puts the significant creatures and events of prehistoric times into context and explains them clearly and factually. The colourful illustrations, which feature on every page, will captivate school age readers.

H/b, 96pp, Golden Press, HarperCollins, 25 Ryde Rd, Pymble 2073. Ph: 02-9952-5000. RRP \$24.95.

Dinosaur Laughs

Why did T-Rex have a bandage?

Because he had a dino-sore.

Which dinosaur slept all day?

The dino-snore.

Which dinosaur never gives up?

Try-try-ceratops.

What do you get if you cross a pig with a dinosaur?

Jurassic Pork.

What do you get when a dinosaur sneezes?

Out of the way.



Which Dinosaur Am I?

Each of the descriptions below fit a type of dinosaur. See if you can match them. Draw a line from the description to the correct answer.

- | | |
|---|-------------------|
| 1. I have a spike on each thumb that I use to fight off attackers. | Brachiosaurus |
| 2. I have two rows of upright plates running along my back which help protect me from attack. | Triceratops |
| 3. I have three horns on my head. | Iguanodon |
| 4. My name means 'king tyrant lizard'. | Stegosaurus |
| 5. My name means 'arm lizard'. | Tyrannosaurus rex |

'Which Dinosaur Am I?'

- 1=Iguanodon 2=Stegosaurus
3=Triceratops 4=Tyrannosaurus rex
5=Brachiosaurus



IN THE KITCHEN

This time we look at the versatile and delicious citrus fruits. The most popular of these are oranges, lemons, limes, mandarins and grapefruit, but others less widely known include citrons, pomelos, blood oranges, tangelos, kalamansis. All are useful sources of vitamin C – oranges and lemons probably more so than others – and deserve to be used more to complement our cooking with their refreshing flavours, as well as to be enjoyed in their own right. Add a little tang to your cooking, use more citrus.

Every backyard needs at least one lemon tree, which will provide its tangy fruit for juicing and for flavouring myriad other dishes over much of the year. Those having only a small area will find the Meyer lemon most suitable. A citrus fruit salad tree, having several citrus varieties on the one tree, is a good option where space is restricted.

Careful selection of varieties will enable an almost year-round availability of home-grown citrus fruit. With oranges, for example, Valencias will fruit in spring and summer, while Navels will be available from autumn to spring. Ask about this at your nursery when buying or ordering trees.

Most citrus fruits will hang on the tree for many weeks after maturity, so you need only harvest as you require the fruit. If a fruit looks a good colour and size and will come off with a firm twist, it's ready to use. Do not, though, twist or pull mandarins, as their thin skin is likely to tear away. The longer citrus are left on the tree (up to a point) after maturity, the juicier and better flavoured the fruit will be. However, at the first sign of deterioration in skin colour or texture, harvest the remaining fruit and use it quickly.

Once picked, fruit will keep well in the fridge for several weeks, mandarins less well than most others. Fruit can be frozen, either whole, segmented, or as juice for later use.

MYRIAD USES

Citrus fruits are traditionally used to make marmalade. Try varying your usual recipe with combinations of fruit: lemon and lime, grapefruit and orange, lemon, lime and orange. The addition of even a small number of limes can subtly alter the flavour of your favourite marmalade toast topping. Seville oranges, with their strong bitter flavour, are the traditional marmalade oranges, but other varieties can be used to give a



sweeter flavour.

A range of cordials can be made with citrus juices, or they can be added to combinations of other juices, or port/wine and spices, to make a variety of delicious drinks for summer or winter. The traditional hot lemon and honey drink is still a popular and comforting remedy for cold and flu sufferers.

Citrus rind, thinly pared or grated, with no white pith attached, is a popular flavouring for cakes, puddings, sauces and marinades. Try adding some grated rind of lemon or orange to your favourite plain scone or muffin recipe. You can also substitute orange juice for part of the liquid in the recipe.

Lemon juice, pips and pith are high in pectin and often used to help set jams and jellies, especially when using low-pectin fruits such as strawberries, or overripe fruits in which the pectin content has diminished. Pips and pith can be placed in a muslin bag suspended in the preserving pan and later easily removed.

A light brushing with lemon juice will prevent foods that oxidise readily (apples, pears, bananas, avocados, sweet potatoes) from discolouring between preparation and serving.

Lemon juice squeezed over fish or

meat before cooking both tenderises and adds a piquant flavour. Lemon, lime and orange flavours all complement poultry extremely well, whether used as a marinade, incorporated in a stuffing, or just squeezed over the bird prior to cooking.

SIMPLE LIME PICKLE

- 3 large limes, thinly sliced
- 2 tbsp coarse salt
- $\frac{1}{2}$ tsp paprika
- 1 tsp dill seed
- vegetable oil, to cover

Spread lime slices on a wire rack over a large tray, do not overlap. Sprinkle with salt and leave overnight. Next day, wash, drain and pat the fruit dry (use paper towel). Arrange into a sterilised jar, sprinkling paprika and dill seeds between layers. Cover with oil. Leave at least four weeks before using.

Fruit can be used to accompany grilled fish or meat, or with curries. Once fruit is all used, the oil can be used in salad dressings, or to brush over meat or fish before grilling.

TOFU DELIGHT

- approx 600 g firm tofu, cubed
- 2 red capsicums
- 2 onions
- 2 green capsicums
- 1 tbsp French mustard
- 2 tbsp brandy
- 1 tbsp chopped marjoram
- grated rind 1 orange
- juice 1 orange

Mix marinade of mustard, brandy, marjoram, juice and rind. Pour over tofu cubes and gently mix till cubes are well coated. Leave in marinade for several hours or overnight. Cut capsicums and onions into bite-size chunks. Thread tofu, capsicum and onion onto metal skewers; will make eight. Grill kebabs 10 – 15 minutes, turning frequently and brushing with marinade during cooking.

MAKE YOUR OWN SAUSAGES

PART VI: For Immediate Use

by Lucy Daugalis, Daw Park, SA.

Last time I shared some recipes for long-keeping sausages. In this issue I conclude the series (GRs 135-140) on sausage making with some recipes for immediate consumption; these are tea-wurst, scalded sausages, sausages for boiling and frying and liverwurst.

TEA-WURST

Tea-wurst is made from pork and bacon only, or with the addition of beef (of a young animal) in various proportions, according to the recipes in the chart below.

Recipes 1 – 6

(See chart below for proportions.)

For 1 kg meat use:

28 – 30 g salt

0.16 – 0.2 g saltpetre

1.5 – 2 g sugar

0.4 – 0.5 g cardamom

0.8 g cinnamon or 1.5 – 2 g white pepper

After being cooled down and having membranes removed, the beef is ground through a tight (2 mm) grinder. After putting in the pork, the meat is ground a second time, and after adding the spices – a third time. In between the grindings, the meat should be cooled down well, also before filling into casings.

If the pork is very fatty, it should be well cooled down before grinding so that the fat is firmer. It is better to use lean pork and add some bacon.

After adding the finely chopped bacon, meat should be well mixed, water added (for 1 kg meat 60 – 80 g water), and then firmly packed into casings. The prepared sausages are somewhat dried off, smoked in hot smoke until they are light yellow, and then boiled.

SCALDED SAUSAGES

For these sausages pork, veal, beef and bacon are used. Beef should be from young animals, it is then juicy, binds easily together and is of a light colour.

Recipe No 1

5 kg lean pork

5 kg beef (young animal)

150 – 200 g salt

10 – 15 g white pepper

1.5 g saltpetre

3 g nutmeg blossoms

5 g cardamom

about 5 lt water

Recipe No 2

6.5 kg beef (young animal)

3.5 kg fat pork

150 – 180 g salt

2 – 4 g white pepper

1.8 g garlic

about 4 lt water

Recipe No 3

6.5 kg veal

3.5 kg fat pork

3 eggs

about 1.5 lt water

180 g salt

1½ g lemon peel

nutmeg, according to taste

Recipe No 4

5 kg veal

5 kg fat pork

150 – 200 g salt

10 – 15 g white pepper

3 – 4 g ginger or lemon peel

about 3 – 3.5 lt water

A just-slaughtered calf's fresh meat, or beef of a young animal should be slightly salted and kept in a cool place. Too long or too warmly kept meat has no binding (connecting) power and is less suitable for making sausages.



Beef or veal is finely ground and mixed well, adding cold water. Then the more coarsely ground pork, salt and spices are added. The mass should be of medium consistency. It is filled loosely into thin casings (sheep's are best) into short sausages of 10 – 15 centimetres.

The sausages are smoked for 20 – 30 minutes in hot smoke, then scalded or dipped for a few seconds in gently boiling water. When removed, cold water should be poured over them, so that they do not become wrinkled. If the sausages are not used immediately, they should be placed in hot water for 5 to 6 minutes or steamed, before serving.

Sheep's casings keep longer if, after being thoroughly cleaned and salted, they are smoked for a little while. Before using they are soaked in warm water, and the water and air removed by squeezing through the hand. Then the casings are scalded in hot water, so that they become narrower.

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Kind of meat	Tea-Wurst Recipes (quantities in grams)					
	1	2	3	4	5	6
Beef	350	-	250	250	400	425
Pork	470	750	380	350	350	425
Bacon	180	250	300	400	250	150

SAUSAGES FOR FRYING AND BOILING

For these sausages poorer quality meat can be used. It is ground into pea-sized, or smaller, pieces. Fresh, not quite mature, but cooled down meat is suitable for these.

Frying Recipe 1

6 kg lean pork
4 kg fat pork

Frying Recipe 2

6.5 kg lean pork
3.5 kg fat pork
Spices for 1 kg meat:
25 – 30 g salt
2 – 3 g white pepper
1 – 6 g nutmeg blossoms
a little (80 g) water

If making frying sausage from lean pork only, bacon should be added in the proportion of a quarter or more. These sausages can be made also with a small amount of beef added (up to 10 percent). Beef should be ground through a 2 millimetre hole attachment to the grinder, pork and bacon through 4 – 5 millimetres. The ground meat should be well mixed, water added, and make loose, short sausages. Before frying, they should be dipped in boiling water (then the sausages do not burst during frying), then dried, rolled in flour and fried on all sides.

Frying Recipe 3

This is made according to recipe 1 and smoked for 12 – 24 hours. Such sausage can be eaten without frying.

Frying Recipe 4

7.5 kg lean pork
2.5 kg bacon
Spices for 1 kg meat:
30 g salt
2 – 3 g white pepper
0.5 g cardamom
½ a beaten egg
75 g unboiled milk

Meat should be ground through a medium grinder, bacon should be finely chopped. After putting in salt and spices, meat should be well worked over. When mixed, beaten egg and milk should be added. Prepared mass is then loosely filled into casings.

Boiling Recipe

Fat pork should be ground through a medium grinder attachment. If the meat is lean, some poorer quality bacon or meat from the pig's jaw can be added. For spices, some black pepper, salt according to taste, and a good



deal of fried onions is added. The casings are filled loosely, so that they do not burst during boiling.

3.3 kg veal
3.3 kg fat pork
3.4 kg lean pork
216 g salt
9 – 12 g white pepper

Meat is ground fine, mixed, 400 grams water is added, then salt and pepper. Loose and short sausages are smoked for 30 – 60 minutes in strong smoke, and cooked slowly for 15 minutes before eating.

LIVERWURST

Liver is soaked in cold water for several hours. Then it is cut into three or four pieces and cold water is poured on it which is then heated to 80 – 90°C.

Without allowing the liver to boil, the water is changed again into cold. This is repeated three to four times. When the water is poured off for the last time, the liver is cut into flat pieces, two to three centimetres thick, the hard pieces (membrane and gristle) removed and, after adding bacon bits fried with onion, and juice, the liver is simmered in a covered pot. It should be stirred now and then. Afterwards the liver is cooled and ground two or three times through a tight (small-holed) grinder attachment. At the same time about 200 grams of white bread soaked in milk is put through the grinder. The mass should then be worked over very well, three raw eggs are added, also some of the juice and fat, so that the mass is medium consistency. The spices to be added are white and aromatic pepper, nutmeg blossoms, a little ginger and salt according to taste. Not too many spices are added to sausage of this kind.

The worked-over mass should be loose and fat, the thickness of a good sour cream. Then fresh (unsmoked) chopped bacon is added, in the proportion of one-third of the weight of the liver. After working this over, loose short sausages are made. They are then placed for ten minutes into hot (90°C) water.

Liver sausages, when heated, expand a lot and burst if they are too tightly filled. They should be heated in a large container, so that, when they expand, they do not press against each other and can be turned over. When taken out of the water they should be pressed lightly (with a not-too-heavy object). These sausages can be kept in a cool place for up to two weeks.

A booklet entitled, *Making Sausages*, and a list of other publications, is available for \$10, from: Lucy Daugalis, 18 Rockville Ave, Daw Park 5041.



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WHEN IT'S WRONG TO PLANT TREES!

by Vanessa Craigie, Native Grasslands Coordinator, NRE.

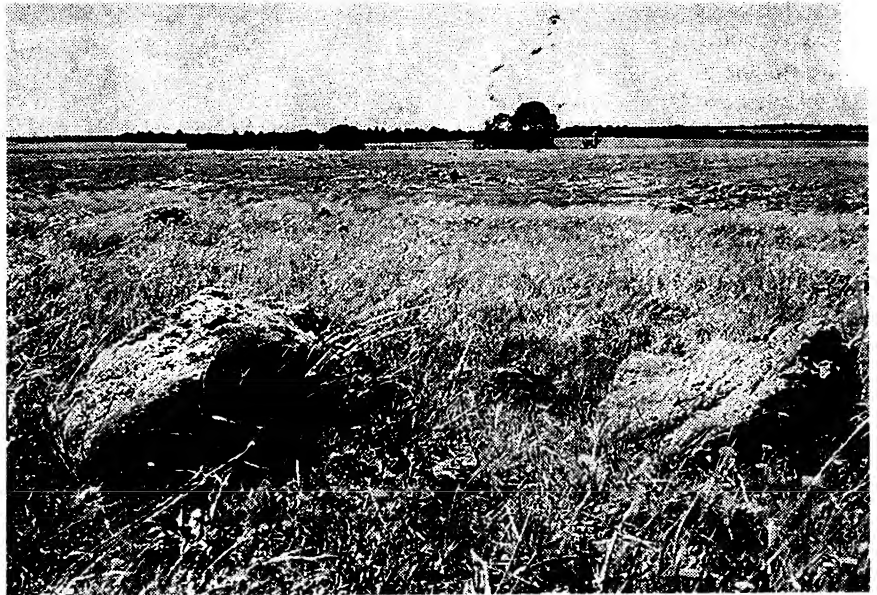
Just about everyone is aware of the loss of tree cover in the country, and the importance of trees in providing shade and shelter, lowering water tables, stabilising the soil and providing wildlife habitat; so everyone would agree that tree planting programs are necessary and valuable projects for any group to undertake – as long as the trees are planted in the right place.

There are parts of Victoria that are naturally treeless or sparsely treed, such as heathlands and native grasslands. Native grasslands are one of Victoria's most threatened ecosystems, consisting of a few isolated fragments on roadsides, rail reserves, and bits of lightly grazed, unploughed, unfertilised farmland.

Native grasslands are often hard for the uninitiated to recognise, except when they show magnificent wildflower displays in spring. Typically, native grasslands occur on open rolling plains and consist of dominant tussock grasses, generally kangaroo grass (*Themeda triandra*), wallaby grasses (*Danthonia* spp.), spear grasses (*Stipa* spp.) and tussock grasses (*Poa* spp.). Flowering herbs of the daisy, lily, pea, orchid, and several other families, occupy gaps between the grass tussocks.

So much of the native grassland ecosystem has vanished that intact remnants are few and far between, but those that remain support a large number of threatened plants and animals.

While native grassland remnants are indeed bright and colourful in spring and early summer, at other times of the year they can be relatively drab and may be hard to distinguish. Unfortunately, several native grassland remnants on roadsides and on private land have been destroyed by tree-planting programs during the 1990s, one as recently as late last year. This destruction has been completely unintentional — well-meaning Landcare or farm forestry groups may not have sought the right information for their local area, or may have been advised incorrectly in the past.



Native grasslands often display a colorful variety of wildflowers during spring and early summer.

When planning your tree planting project, have a good look at the ground vegetation. Use plant handbooks to see if you can identify anything that looks native. You can find out whether your site is in an area that was once naturally treeless native grassland or sparsely treed grassy woodland, by consulting the NRE flora and fauna officer in your area. If you're thinking of planting out a roadside, you definitely need to check with NRE and your local government to ascertain whether the site is on a register of grassland remnants.

Some of the best grasslands are on roadsides, particularly strategic fire-break roadsides. These 'three-chain' roads can be appealing as tree planting sites, but CFA brigades are now keen to retain native grasslands on roadsides because they create a smaller fuel load and tend to remain green through summer, rather than drying off like the more inflammable exotics. Once a native grassland is ripped for tree planting, the disturbed soil provides an invasion ground for weeds and highly inflammable exotic species such as phalaris.

Before you start, get a knowledgeable botanist to check out your proposed site to identify any native vegetation. You can generally get botanical assistance or contacts from the local NRE flora and fauna officer, Land for Wildlife officer, field naturalists club, Bushcare facilitator or Trust for Nature.

If there is no native vegetation, it's best to plant indigenous trees. If you can, also plant the original low understorey vegetation. Understorey vegetation has considerable values for natural pest control, for providing wildlife habitat and biodiversity, and for protecting and enriching the soil. If there is some native vegetation remaining, design your planting program to complement the existing remnants, rather than replacing them. If there is intact native vegetation — protect it! It's enormously rare and valuable.

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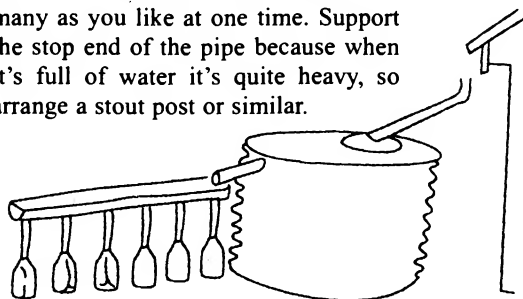
RECYCLING MILK BOTTLES

by Roberino, Arrawarra Beach, NSW.

As I have written before, these are extremely useful when empty and cleaned; their lids form a good seal and the plastic bottles are quite strong, with a convenient handle for carrying or for tying to anything. I've educated my friends in the city to save these handy items which are usually thrown away by the millions. In times of plenty these containers are useful to store seeds, water, food and so on away from predators, and they can be safely frozen too.

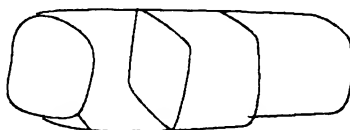
A recent use I've found is for storing granular fertiliser so that it doesn't go off and lose its vitality. The resulting two litres (2 kg) in these containers is easy to handle and not too heavy for kids to give a helping hand, which they love to do. It's a good weight and size for many uses around the house, workshop and farm when simply filled with sand or dirt, and can be a helping hand when there is a wind blowing something around which you'd much prefer not to be.

Heavy rain spells don't last forever and one day when I was staring at the water tank overflow gushing lovely fresh rainwater to waste, I hit on the idea of an old piece of roof guttering under the overflow to channel the water into the stacks of plastic milk bottles I had stored waiting for an idea to use them. I quickly closed the ends of the guttering and punched some round holes in the bottom of the gutter and forced offcuts of old garden hose into them so that I could fill six bottles at once. You could do a much better job using a PVC pipe system bought from your local hardware store and fill as many as you like at one time. Support the stop end of the pipe because when it's full of water it's quite heavy, so arrange a stout post or similar.



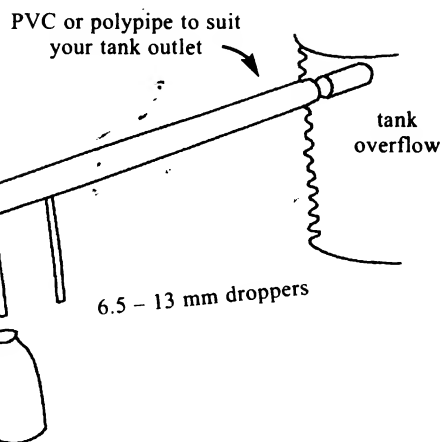
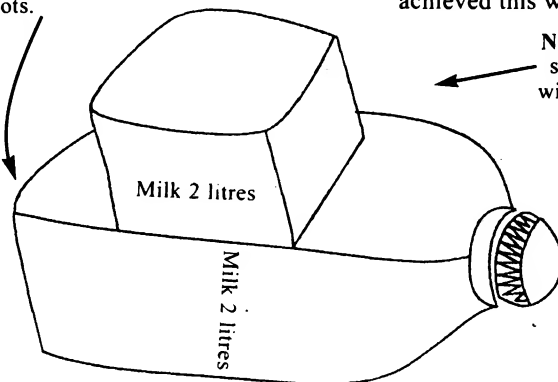
Storing them away from sunlight, such as under the house, would stop the sun's ultraviolet rays degrading the high density polyethylene. When it's dry times the extra stash of rainwater will be very welcome, if only for the garden. I always carry a few of these water bottles in the boot of the car and they can be forever useful from washing your hands to providing a refreshing drink on a hot day, not to mention if the car blows a radiator hose. I have heard of people using them as warm water bottles, not hot water bottles, in winter in cold places such as Dorriggo, but that's only heresay mind you.

Kids lunch boxes can be quickly made using two milk bottles with the tops removed and one coaxed into the other to make an airtight container.



A self-watering, water saving device in which to raise seeds, cuttings, seedlings, plants of all kinds can be easily and quickly made for free.

Number Two, water reservoir, paint with a dark acrylic paint to keep sunlight away from roots.



Cut the top off one bottle and save it, then punch some holes in the bottom with a nail, skewer etc. The other milk bottle now needs a square hole cut in it to allow bottle number one to be placed inside it. Half-fill number one with potting mix or seedling mix soil and seeds, seedlings etc. Water well, any excess will be saved in bottle number two for later when required. Now the reserved top which was cut off number one can be coaxied into the main base of the number one bottle and the lid placed on if there are seeds in the soil, or the lid off for seedlings, flowers and larger plants.

These recycled plastic milk bottles are now humidifier pots, ideal for raising seeds in winter and protecting the seedlings from frost with the lids on. In summer you should have these pots in a shady area without the tops on to protect the seedlings from sunburn. Check every few days on the water reservoir in number two. An easy low-maintenance garden can be cheaply achieved this way.

Number One save top for winter's frosts

MISTS AND MOUNTAINS

by June Birkett, Crystal Creek, NSW.

We relocated our dairy farm from the mid north coast to the Tweed Valley because the Roads and Traffic Department were building a bypass road on our old farm. The Tweed Valley area is a particularly beautiful part of Australia with lush growth, hills and valleys and rainforests. From the front of our verandah a beautiful scene of the Queensland Border Ranges faces us. Often it is covered in mists and sometimes those mists roll over the border as either soft rain or torrential downpours. Bananas cloak many of the surrounding hills, while on others nut, citrus or passionfruit grow prolifically. The volcanic soil induces quick growth, for weeds as much as anything else.

The variety of plants in the gardens is extraordinary. Close to our house a bougainvillea has grown steadily up a twelve-metre tree, covering over half of it, and it flowers continually, a deep wine colour. Viewed from further down our paddocks it is truly glorious in its enormity. A smaller variety covers the back part of the garage and is breathtaking in its display of brilliant colour. In fact, the one thing most noticeable in the valley is the richness of colour in the flowers and the greenness of the grasses displayed between majestic rocky backdrops.

Along the Numinbah and Nerang Roads the views are breathtaking, with the heavy mists sitting on or rising from the valley floors. The fusion of the rain, rock, mists and brilliant greens of the grasses is so memorable, once seen will be always remembered.

The Tweed Valley is one of the largest valleys formed from volcanic explosions. It is called a shield volcano and covers a huge area. Because of the richness of the soil, the valleys are extremely fertile. Our creek, over which we need to pass daily, is usually fast flowing but gentle, until the heavy summer rains when it will grow into a roaring torrent, cutting us off from the roadway, flooding the lower paddocks and sometimes bringing down large



June pictured here under her favourite spectacular bougainvillea, enjoys life on the new farm in the Tweed Valley.

trees. It is a land truly epitomising the tranquillity and the savageness of nature.

The dairy cows feed off the creek flats sown in brilliant greens of rye or clover. Some of the hills still have ancient rainforest remnants where trees so old and bent tell of their struggle for life and portray their own wild beauty. Wildflowers grow at the base of giant trees, creating a place one can linger and contemplate, dreaming of another time, place and life.

Everywhere, surrounding our home of old Queensland construction, are the birds. The farm is so quiet that sounds of birds fill the ears from morning to night and every colour of bird flits through the air. Mountain birds come down from the borders for the winter, parrots in summer, providing colour everywhere, and our ears and eyes feed from the sound of their music and the ever-changing picture their antics create. We overflow with thanks. We have such beautiful frogs, large luminous

green ones who sit on their haunches, their delicate fingers outspread. There are the beautiful brown frogs, with traced patterns more exquisite than any human design. When we walk up into our higher hills we see Mt Warning and surrounding peaks and the grandeur always takes my breath away.

Occupants of the Tweed Valley encompass a mixture of nationalities and the town is like a large family with

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close bonds apparent between people. The Tweed River runs through the town of Murwillumbah, flooding sometimes if the rain is exceptional. Parks and well-kept gardens complement the natural beauty. However, I think the most remarkable feature of the area is encountered when driving out of town towards the mountains and seeing nature present itself in all its glory, peak upon peak, rainforest trees, flowers, shrubs and grasses, rocky outcrops, all massed together in overwhelming beauty.

I recently stood in the middle of a mountain stream and watched it drop over a cliff face. Before me lay the valley floor, rainforests, and, in the far distance, the ocean. That is a feeling to keep for a lifetime. Yes, the Tweed Valley has many ancient secrets kept by nature for the benefit of those who have the sense to appreciate it.



GROW YOUR OWN TEA

Instead of paying money to buy processed, individually wrapped herbal tea bags, grow your own. Have mint, thyme and lemon balm growing in pots. Pick a small handful of each and place in a teapot and just add boiling water. Delicious and cheap. Experiment with different herbs. Many of these herbs have medicinal properties as well.

Rebecca Zand-Vakily, Perth.



COMPUTER PLAY

Studies now suggest children's learning skills can be impaired when they play with computers instead of toys. Charles Sturt University research indicates the group of children most likely to be affected are the offspring of parents who are ambitious for their children and let them operate computers far too much. The study shows that these children's knowledge of three dimensional figures, depth of field, stopping distances, visual perception etc was gained only by playing with 3D objects. Parental participation was vital in preventing children becoming too absorbed in gadgetry and the researchers warned that a generation might be produced that was highly computer literate but lacking the basic skills of physical perception.

GARDEN BOUNTY

Carrot

by Cheryl, Karalee, Qld.

Carrots require rich, well drained soil but do not add fresh manure or they will grow to be deformed. They are best grown in deep soil that was fertilised for a previous crop. Plenty of water is needed and they grow very well with peas, lettuce and onions.

Carrots contain an abundance of vitamin A and are full of healing properties making them excellent for dry, sensitive and aging skins.



DRY SKIN TONER

- 1 cup mineral water
- 4 tbsp carrot juice
- 1/2 tsp glycerine

Place all the ingredients in a bottle and shake to combine. Use daily and keep refrigerated for freshness.

CARROT FACE PACK

- (blemishes and acne)
- 1 chopped carrot
- 1 tbsp lecithin
- 1 tbsp wheatgerm

Boil the carrot until soft in enough water to cover, topping up when necessary. Mash the carrot with the water and add the lecithin and wheatgerm to make a paste: Apply to the face and neck and leave to penetrate for fifteen to twenty minutes. Rinse off with tepid water.



CARROT AND BUTTERMILK CLEANSER

- 1 carrot, juiced
- 1 cup buttermilk

Mix the ingredients and use daily on a cotton ball to cleanse. This cleanser must be kept refrigerated.

NOURISHING CARROT CREAM

- (dry and sensitive skin)
- 6 tbsp safflower oil
- 2 tbsp lanolin
- 1 tbsp paraffin wax
- 1 tbsp warm carrot juice

Melt the first three ingredients together then remove from the heat. Add the warm carrot juice and whisk until completely cool. This cream can be used as a night cream. Night creams actually do all they can within fifteen minutes, so wipe away any oiliness after this time to save your pillow from staining.



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DAIRY PRODUCTS

by Michael Dodel, Raleigh, NSW.

Until 30 years ago, most people still had access to farm-fresh milk. Nowadays, the norm is to buy milk and other dairy products in supermarkets, tempted by labelled attributes like 'fresh' and 'natural'.

'Freshness' in soft cheeses is achieved by destroying as many bacteria (good and bad) and yeasts as possible. Lactic acid bacteria, for example, have been killed during the heat treatment, but later added again in order to sour the pasteurised milk. They are destroyed once more (via more heat and mechanical treatment), otherwise, of course, they would multiply in the 'fresh' cheese and reveal its true age.

To further our understanding of milk products, let's have a look at some examples. Although some recipes are given and explained, it is equally important to understand the way milk reacts to external factors and conditions. Enthusiasm and experience, through trial and error, will soon reward you with a truly natural, healthy and delicious dairy product. I also intend, with this article, to encourage people to take responsibility for their food provision, thus taking pressure off a land overburdened by human greed and monocultures.

Cheese recipes are region-specific. It is hardly possible for a cheese maker on Australia's east coast to produce, for example, 'Emmentaler' or 'Tiroler Grey' cheese. These are products which can only be made in Emmental or Tirol. Everything from the cows' fodder to the final storage of the cheese will be different here from what it is in Europe or North America. With milk originating from Friesian cows living on Queensland river flats, one can't duplicate a cheese made in Tirol from Swiss cows' milk!

However, milk will act in similar ways anywhere in the world and leaving raw milk at cool temperatures will result in fat rising to the surface. Separate the fat from the skimmed milk and you have cream.



CREAM

Cream is milk which has a high fat content of at least 10 percent. There are two ways to obtain cream:

- You can use a centrifuge or cream separator. Warm the milk in a water bath to 40° C and pour it through the separator. At this temperature all the fat is separated from the milk. You are left with cream and skim milk, which can still be used to make some cheeses. Cream separated by a separator is richer in fat!

- Pour the milk into a big, flat bowl and leave it at 10° to 14° C for 12 to 24 hours (sheep's milk 24 to 36 hours). The greater the surface area, the easier the fat can rise! Collect the cream slowly with a ladle from the surface of the milk. The later you skim the milk, the creamier it will be (but also the more sour!). Cream with more than 30 percent fat content can be beaten to whipped cream.

Cream left at around 18° C will turn into sour cream after approximately 12 hours, if you mix 5 percent (or 50 ml/litre) of either buttermilk or whey with it. This sour cream can be refrigerated and it will keep up to five days. Since sour cream is the product butter is made from, we can save cream over four days (at 4° C) in order to obtain a decent amount to make it worthwhile to make butter.

BUTTER

Butter used to be a seasonal product. Traditionally, farmers produced butter in summer when there was plenty of milk. Butter doesn't last long at all if it can't be cooled, so it was preserved by mixing it with salt. If salty butter is fancied, two percent of salt (2 g/100 g of butter) is sufficient.

To manufacture butter you need either a butter churn, an electrical mixer, or a solid bowl and strong arms. I have heard that cream put in a sealed container and shaken like a cocktail will turn into butter. It is the mechanical input (shaking or beating) that results in the separation of fat from the other ingredients of the cream. Horse-drawn milk carts were the first to have sophisticated suspensions, otherwise they would have delivered butter instead of milk!

To obtain butter, fill your container halfway with the prepared sour cream and start beating, shaking or turning it in a regular rhythm. After about 25 minutes, the fat will start to separate. Then corn-sized butter balls will float to the surface and the liquid (butter-milk) will remain at the bottom. Drain the buttermilk, replace it with clean water and wash the butter until the water becomes clear. Then pat the butter either by hand or with a wooden spoon until no more water or buttermilk can be pressed out.

Buttermilk bought in supermarkets is called 'cultured' buttermilk. This is not the by-product of butter making, but skim milk inoculated and treated in order to resemble the original. Needless to say, cultured buttermilk can't match the natural by-product in nutritional value.

Goats' milk doesn't cream very well and it is more efficient to use a cream separator. But goats' butter is absolutely delicious and well worth the effort. By working and patting the butter in different ways, we achieve different results, very much like a baker who can bake different kinds of bread from the same flour.

Very few people these days are producing their own butter and we buy an industrialised butter substitute that has only very little in common with the original product. If you buy butter, buy the cheapest one! Unfortunately, the quality of more expensive butter is just as poor. The only difference is the longer shelflife, which also depends on the amount of salt added. Alternatively, you can buy thickened cream (must have above 30 percent fat content!) and buttermilk, mix 2:1 and leave standing for three hours. Then cool it to 10° C and after 30 minutes of (aforementioned) aerobics you will have butter.

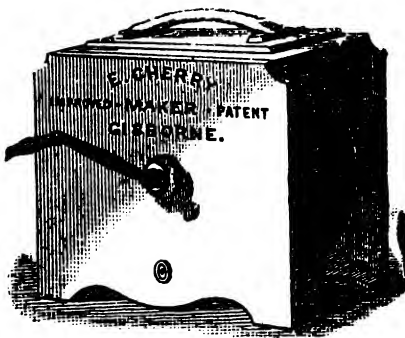
SOUR MILK PRODUCTS

Sour milk is obtained by leaving (preferably raw) milk well covered at 15 to 22° C. At this temperature, the lactic acid bacteria will spread rapidly and turn the milk 'sour'. Using fresh raw milk we get a refreshing drink, or we can 'process' the sour milk into a soft cheese by ladling it into a sieve, then draining the whey.

Sour milk can also be turned into a nutritious soup. Pour one part boiling water into two parts sour milk, stir it, add salt and caraway seeds and leave it on the hot plate for 10 minutes. Add croutons . . . ready!

Yoghurt

The first yoghurt producers were the people of the Middle East and southern Europe. Milk was kept in lambs' stomachs and naturally turned into yoghurt. Fortunately, there are simple alternatives and yoghurts made from cows' or goats' milk (goats' yoghurt is rather liquid!) are just as delicious and healthy. If you don't have a yoghurt maker (they are quite economical and



practical) you can do the following:

Stir three percent of yoghurt into the milk (30 ml for 1 lt). Use your previously made yoghurt or buy some from the shop, but confirm it says 'contains live culture' on the label. Warm the inoculated milk to 45° C, then fill it into prewarmed jars. It is important to maintain the milk at that temperature for at least four hours. Wrap towels around the jars and put them in the sun. Or use a solar cooler or heat box, or even a water bath in a prewarmed oven. The temperature must not drop below 40° C!

Other sour milk products include: kefir, Swedish milk (jaette-milk), skyr, kumys (koumiss), matzoon, lassi and kishk (kurut).

FRESH CHEESES

A cheese is called 'fresh cheese' if it is either completely unripe or only very slightly ripened. It has nothing to do with the term 'freshness', as in newly made. Fresh cheeses from supermarkets are not fresh, but a product designed for maximum shelflife (of up to many months!).

A homemade fresh cheese is obtained by straining coagulated milk through a cloth or form. Hung up

above a container (to collect the whey), the curd will dry within 6 to 24 hours. Usually milk is coagulated with the addition of rennet, but we can also use vinegar, lemon juice, acetic acids, some kinds of leaves or other parts of a variety of plants – for example, the latex of the common edible fig (*Ficus carica*), salted stinging nettle, thistles (*Cynara carbunculus*), the fruit of *Solanum giganteum*.

Animal rennet is derived from the fourth stomach (abomasum) of calves, goat kids or lambs. Young animals for rennet production should be milk fed (not grass fed) and about two weeks old. Whatever coagulant you use, it requires experience to specify the right quantity. It has to coagulate the milk by the desired time at specified temperatures.

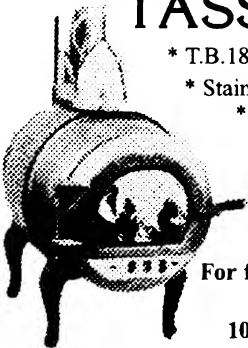
While lemon juice or vinegar should be added at high temperatures, rennet shouldn't be added above 44° C. It is very important to become familiar with whatever you use as a coagulant, because the amount added needs to be adjusted according to milk and room temperature. The warmer the milk (and the room you're working in), the faster the coagulant will curdle the milk.

Besides a coagulant, you won't need anything that you can't find in your kitchen: a saucepan (nonaluminium between 5 and 20 litre capacity), a thermometer, a knife, wooden spoon, ladle and a measuring cup.

FRESH CHEESE RECIPES

Soft Cheese

To 5 litres of hot milk (80° C), add 2 tablespoons of lemon juice. Keep the milk in a warm place until whey separates to the surface. Strain it through a cloth placed in a sieve. The cloth will



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hold the curd. Tie the four corners and hang it up above a container (to collect the whey). When it stops dripping you can shake it a bit until the desired texture is achieved. This cheese will keep for one week in a refrigerator. It can be seasoned or used for cooking and baking.

Not Quite So Soft

A tastier, harder and more sophisticated fresh cheese is manufactured with the help of starters and rennet. The milk has to be clean and raw (up to two hours old) or pasteurised. Add starter culture at room temperature and leave, tightly covered, for one hour. Particular starter cultures can be bought commercially, but adding three percent of yoghurt or buttermilk will work well too. People who make cheese regularly can save some whey and use that for their next batch. The purpose of a starter is to increase the amount of lactic acid bacteria in the milk. After an hour, warm the milk slowly to 35° C and take it off the heat source. Then add the 'right' amount of rennet. For this particular fresh cheese, we want the rennet to curdle the milk within 45 to 75 minutes. Under 45 minutes, the cheese will become sour and rubbery (only fit for chooks!); above 75 minutes you will have a smaller yield and the cheese will be very soft, but still delicious. Therefore, start with the least amount of rennet you think might do the trick. If you didn't add enough rennet and no coagulation is obvious, let the milk sit overnight. It will be curd the next morning, then proceed as for soft cheese, above.

All being well, the milk will have turned into curd after about one hour and be ready to 'cut'. You will be able to tell by sliding a knife down between the

curd and the inside of the container. Then pull the knife one centimetre towards the centre and you should see a gap between knife and container. This gap will slowly fill with whey, but it shouldn't collapse. Now gently cut the curd with a knife (or any clean, sharp object) in cubes about two centimetres wide. The cuts should be visible and the whey will separate immediately. The colour of whey should be closer to green than yellow. Cover the container again and let it sit for 10 minutes. By then some whey will swim on the top and you can ladle some off. Then transfer the curd with a sieve from the container into your forms (if you use cheesecloth, proceed from here as above).

As forms, we can use strong yoghurt buckets in which we drill plenty of small holes (1 mm diameter). The whey will continue to drip for around 24 hours, so make sure it has somewhere to run into. During that process the cheese can be pressed, according to your preferences. The cheese can be taken out of the form when solid enough. Depending on applied pressure and temperature, this will take anywhere between 12 and 36 hours. Eat this cheese as it is, maybe with some salt, pepper or herbs. Alternatively, cut it into three-centimetre-wide slices, roll them in salt and store them between 10 and 18° C for a few days, turning over daily. The longer cheese ripens, the harder and spicier it will be. This cheese can be kept for about three weeks. Cheeses can't ripen in refrigerators, they are too cold and too dry. On the other hand, if the temperature is above 20° C, the lactic acid bacteria can multiply too fast and the cheese will turn rancid/sour, maybe even 'blow up' due to the rapid spread of gas-producing bacteria.



Preserving Cheeses

There are three ways to preserve fresh cheeses:

- Store the dried cheese in a five percent saline solution (brine). It will keep like this for 10 days outside or three weeks inside a fridge.
- Store the dried cheese in its own whey and it will keep for three weeks in a fridge.

- Marinate the cheese. Place into an airtight jar and cover it with clean oil, preferably olive oil. Season it with black and/or white pepper, bay leaves, juniper berries, thyme, rosemary and sliced onions. Marinated cheese can be stored for up to two months uncooled or six to eight months in a fridge!

In a climate such as here on the northern coast of NSW, the ripening and storage of cheeses seems to be the toughest hurdle to overcome. The ripening process of any harder cheese requires a constant temperature of from 14 to 17° C and a humidity of around 90 percent. I make harder cheese varieties only during May, June and July, as they need between four and 20 weeks to ripen and mature.

Unfortunately, this is the time when dairy animals produce very little milk. Obviously, cheese making has traditionally been done during summer, when milk production was up. In warm countries, like Greece or southern France, cheeses were soft and had to be used within weeks, as salt was the only means to preserve them (feta cheese). In cooler areas, like Switzerland or northern Italy, hard cheeses were made during summer as a winter milk reserve. This was possible because farmers had access to cellars or caves with a constant temperature below 18° C. Cheese loaves can ripen over months and even years (real Parmesan). During that process they develop a red-yellowish grease which prevents moulds from attacking the cheese!

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NEST BOXES FOR PARDALOTES

by Alan Stewart, Alexandra Hills, Qld.

Working with wood is nearly always pleasurable, with the possible exception of Queensland walnut which smells strongly of dog poo when cut. It is a beautifully figured and coloured timber, but oh what a niff. So when I managed to get hold of some western red cedar offcuts it was absolute bliss. It works easily and smells absolutely wonderful.

I decided to build a pardalote nest box with it. Pardalotes are fairly common in some areas and will nest readily in an artificial hollow often close to human activity. They feed on insects, including scale and lerp insects which infect eucalypt trees, so will help protect your plants from insect damage. The breeding season extends from August to February, with four eggs usually being laid. They often breed three times in one season. There are records of nests in a variety of unusual places: lengths of downpipe, roadside newspaper holders, discarded lino.

CONSTRUCTION DETAILS

The nest box is a straightforward four-sided affair with a floor and roof, no joints involved. Simply glue and nail (galvanised) the parts together, hinge the roof and use a simple tie-on. A 30 millimetre pipe must be used for bird access. Our council recycling yard has plenty of second-hand piping at very low prices so try yours for same.

To make sure the pipe is rigid and secure in the nest box I have used two square collars, one inside and one outside (outside one can be seen in the photograph). Cut the holes marginally wider than the pipe; use a fretsaw if power tools are not available. The pipe should protrude 100 millimetres from the box. Allow for a length of pipe to protrude inside the box before cutting it.

Use generous amounts of Strong-bond or Liquid Nails on both sides and allow to dry thoroughly. A perch of dowelling or a strong twig is then wired to the pipe (see photo).

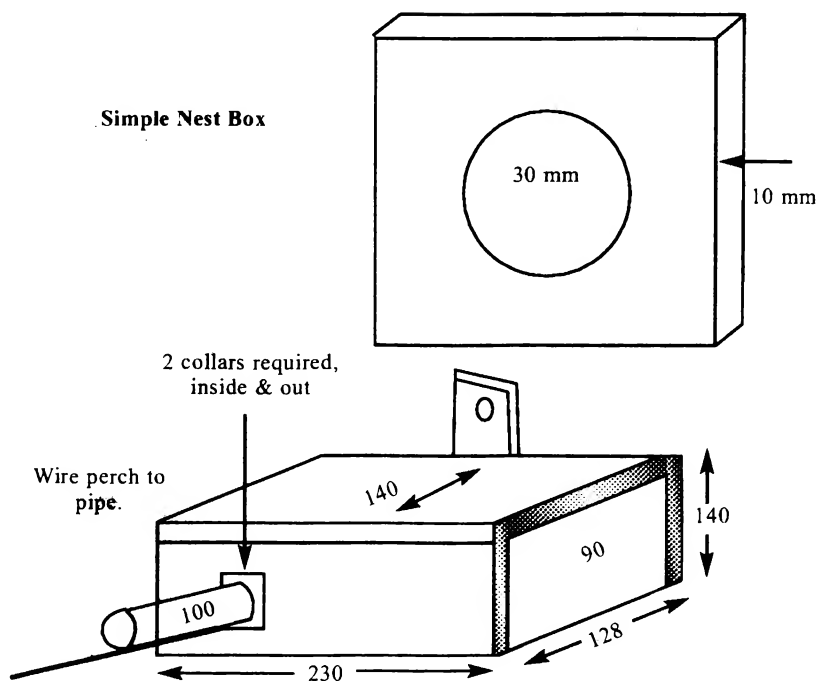
As extra weather protection I have used mostly old corrugated iron, hammered out flat, as the roof. This will



ensure an extended lifespan. Pardalotes are gregarious birds so the boxes are best grouped in threes. Finally, a good paint job is required, brown or green should be okay.

These nest boxes will allow pardalote access and prevent predation by larger pest species. Pardalotes are gregarious, so group boxes close together.

Simple Nest Box



Fixing posts can be vertical or horizontal.

EASY STONE FENCEPOSTS

by Peter Carr, Repentance Creek, NSW.

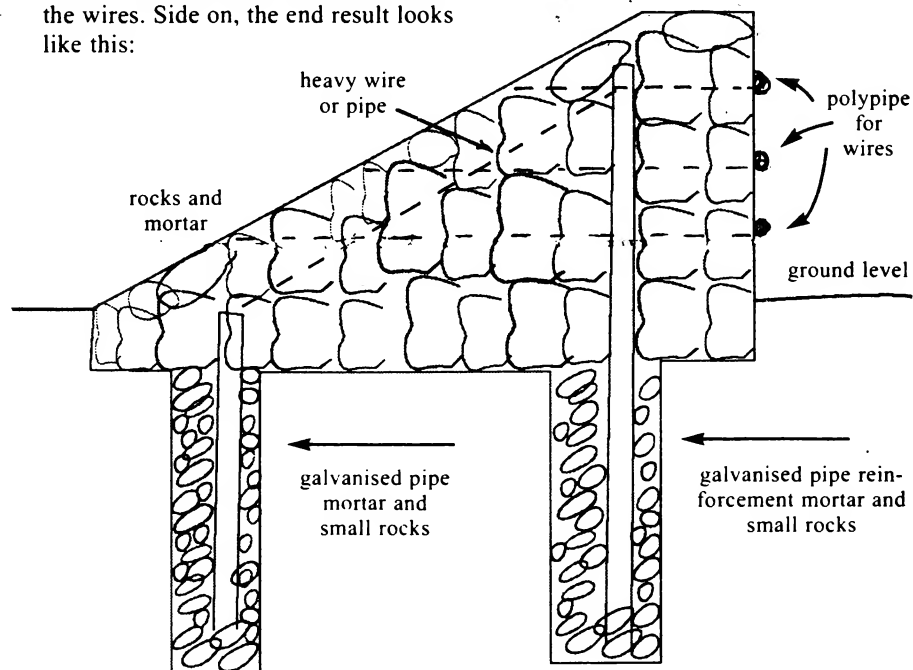
I was once confronted with the need to site a couple of strainer posts at a spot which was solid basalt rock. The thought of digging a hole made me blanch with fear, so I sought a solution entailing minimum exertion. Our farm is blessed with a ready supply of basalt rocks, from pea size to ones you'd need a crane to lift. Their saving grace is that they all have at least two flat faces. I therefore gathered a pile of easy-to-handle rocks, painfully chipped a flattish base area and built a stone pillar about 135 centimetres high and 45 centimetres square. The beauty of it was that I could do as little or as much as I liked.

At that stage I was up to using a batch of cement made in my hand-mixer, but later took to mixing mortar in a galvanised iron bucket with a flat bit of steel. If I felt like stopping after using up two small mixes I stopped. If I was feeling energetic, I'd mix a couple more.

Since my first effort, I have designed a strainer assembly for end and corner posts which can be used anywhere a hole can be dug. The procedure is as follows. With a post-hole digger, excavate two holes, as far apart as is necessary for the proposed length of fence. Around the two holes dig a footing for the rocks, say about 100 millimetres deep. Widen the two holes, if necessary and cement in the centres two pieces of old galvanised water pipe or rusted off star pickets, using a mortar mix and bits of small rocks. The pipe in the second hole only needs to come a bit above ground height while the other bit should be about 100 millimetres shorter than the proposed fence height. When they have set firm, attach them together with a length of reinforcing rod or a couple of lengths of heavy fencing wire. Then you can fill in around the pipes with rocks and mortar.

If it is to be a corner post, dig a third hole and footing at right angles to the main hole and cement in another short piece of pipe before you start cementing in the rocks. You can either cement

in loops of wire to attach your fence wires, or, if you have an old length of hose or polypipe, you can cement lengths in according to where you want the wires. Side on, the end result looks like this:



The procedure is reasonably slow, but the beauty of it is that there is no heavy lifting, and no ramming with a crowbar. Useful accessories are a wife to help collect rocks and mix mortar, some sand and cement (in bucket), and a squeeze bottle of Sunlight washing detergent (added to the mortar, it makes it stick to the rocks). A 25 litre plastic

container for water is also a must, as is a spade and small pointing trowel. The finished product is reasonably resistant to dry rot and white ants and isn't likely to shift in a hurry. Posts can be as wide as the rocks require and you can use star pickets in between strainer assemblies, or, if the spirit moves you, build a few more stone posts.

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GOLLIES GALORE!

by Pamela Odijk, Bribie Island, Qld.

Photograph: Herman Odijk.



All of the gollies in the photograph were made from recycled materials: old clothes (washed and ironed of course); offcuts from dressmakers, tailors, home-sewing leftovers; odd balls of leftover wool. The only new items purchased were washable filling to stuff the doll's bodies, sew-in eyes, felt for the mouths, and some calico to experiment with dolls made from this fabric.

This shows that one need not outlay large sums of money in order to enjoy a craft activity, or to create the kind of craft which is saleable at fetes and market stalls or through gift stores and craft galleries. I have sold my gollies through all of these outlets.

Each gollie when completed stands approximately 60 cm tall. To make them requires one to use three simple skills: basic soft-bodied doll making, knitting using a loop stitch (for making the hair) – instructions given, Seminole patchwork (for making the clothes). This latter is a particular kind of patchwork technique once practised by the Indians who lived in the Florida area of the USA. It does not require templates but is worked in strips, cut, and resewn to achieve the desired effect. (Instructions for this technique were

given in my article, 'A Patchwork Christmas', GR129 Oct/Nov '98). This kind of patchwork seems to suit the folk-doll character of the gollies.

MATERIALS NEEDED

- Small amount of material for the doll's body – an old pair of denim jeans will easily make one doll, so will a child's old windcheater or a small skirt. Half a metre of new fabric will be ample.
- Commercial pattern for a simple rag doll. I used Butterick 3056 and made minor simplifications such as reshaping the feet.
- Polyester toy filling to fill the body.
- Small piece of felt for the mouth.
- Approximately 50 g 8 ply wool or wool/acrylic mixture for the hair and a pair of 3.25 mm (no 10) needles.
- Old pantyhose (or stretch fabric the same colour as the hair) for stitching under the hair, to make a wig, so the polyester toy stuffing which fills out the hair and gives it its shape will not protrude through the loop stitch knitting. If using offcuts of stretch fabric, cut a circle 27 cm in diameter and sew the knitted hair to this evenly all round.
- You will also need some sew-in

eyes, sewing cotton to match the coloured fabrics you use, and elastic and buttons for the clothing

TO MAKE

The Doll's Body

Any commercial pattern for a soft-bodied doll about 56 cm high can be used. It can be simplified, for example by having hands and feet pieces attached to the arm and leg pieces instead of being made separately. The gollie's hair will make this particular doll taller than the pattern indicates. Follow the commercial pattern assembling instructions, but sew all seams *twice* to ensure that the stitching will not come apart. Leave spaces so the stuffed arms can be inserted into the doll's body and sewn firmly (twice) into place before the body and head are turned right side out. Then attach the legs, sewing across the bottom of the torso (twice) through body and legs.

Ensure that you also sew around each leg and arm twice before turning it right side out, and make sure that you sew across the stitching line (elbow and knee) on the arms and legs (twice) before filling the upper arms and upper legs with polyester toy stuffing.

The Hair

Using 8 ply wool and size 3.25 mm needles cast on 17 stitches.

Row: K1, * inc in next stitch, K1. Repeat from * to end of row (25 stitches).

Row 2 and all even numbered rows unless otherwise instructed: K1, loop * to last st, K1.

(*Loop = Insert the needle in the stitch as if to knit, but place two fingers, finger and middle finger, of the left hand under the point of the right-hand needle and wind the wool anti-clockwise around the needle and the fingers twice, then over the needle again. Then remove one finger, index finger, from the loops to enable you to pull these three loops through the stitch, knitting it off the left-hand needle in the usual way. Then slip the three stitches, loops, knitways back onto the left-hand needle and knit them through the back of the loop (tbl) but give the knitted loop a firm tug before removing the remaining finger, middle finger, from the looped stitch to secure it.) This sounds more complicated than it actually is!

Row 3: K11, inc in next 2 sts, K12 (27 stitches).

Row 5: Inc in first st, K11, inc in next 2 sts, K11, inc in next st, K1 (31 stitches).

Row 7: K14, inc in next two sts., K15 (33 stitches).

Row 9: Inc. in first st, K14, inc in each of next 2 sts, K14, inc in next st, K1 (37 stitches).

Rows 11, 13, 15, 17, 19: knit.

Row 21: K17, (K2 tog) twice, K16 (35 stitches).

Row 23: K16, (K2 tog) twice, K15 (33 stitches).

Rows 25 – 28: K2 tog across row.

Cast off remaining stitches but leave a long piece of wool attached.

The Wig

Attaching the hair to the doll is a very important step as this begins to create the doll's final appearance and character. Use a strip cut from old pantyhose and machine sew across the top to form a pocket, or cut a circle as previously described from stretch fabric. Tack the knitted hair to this liner in four places first, then ease the hair to fit the wig liner evenly all around. Machine sew the knitted wool hair to the wig liner with cotton to match the hair colour. Pad out the wig with polyester toy filling.

Thread the long piece of wool through a darning needle and, placing the 'cast-off' stitches to the centre front of the head, stitch the wig into position around and through the doll's head, adding more padding and shaping it as required. Sew through the doll's neck to the other side of the face and continue. Keep sewing through the head (back and front), padding and catching the loops as you go until the desired effect has been achieved. Fasten off this first length of wool securely. Use more wool the same colour as the knitting, and the darning needle, until all the hair has been stitched into place and shaped by being sewn through the padding and the head to make sure that no part of the hair (wig) can work loose or be pulled off. Sew securely at the base of the neck ('cast-on' stitches will be sewn into place here.) You will not see this stitching as it becomes well hidden within the loops of the wig.

The Face

Now, sew in the eyes to complete the expression and add a felt mouth if you like. The mouth can be stuck on to the face with craft glue. Or, draw a mouth of your choosing with fabric paint, or leave

the mouth off altogether. Make sure you position the eyes well; if they are too far apart the doll will have a vacant expression and, if not even, the doll looks peculiar. If they are too close, the doll looks mean and unfriendly.

The Clothes

Make Seminole strips as described in GR 129, adding side pieces so that the strip is approximately 15 cm wide. Cut four strips the length from the doll's waist to ankles, and join, (right sides together), at centre front, centre back, and sides to make a skirt. Four strips will also make the trousers, but only join the centre front and centre back to the point where the legs join onto the body, then sew the sides to form the trousers – outside leg and inside leg seams. Overlock or zigzag top and bottom hems. Turn under a small hem at the waist, sufficiently wide to thread through a piece of elastic.

Make a bib for the top of the skirt or trousers by using a piece of patchwork stripping, trimmed smaller at the sides, doubled over, right sides together and hemmed, then turned right side out. Overlock or zigzag the bottom and machine the bib to the front of the skirt or trousers. Measure and fold a small piece of fabric to make the braces and attach these to the bib and the back with machine stitching. The braces cross at the back. Attach buttons to the top of the bib for decoration. If you have recycled old clothes to make the dolls and patchwork, you will probably have enough buttons cut from the original clothes.

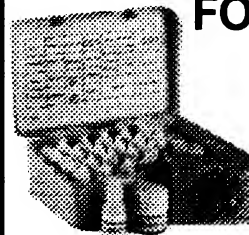
For a girl doll, make a pair of long knickers in a similar way the trousers were made. Use curtain material, broderie anglaise, calico etc and attach some lace. Thread elastic through the waist of the knickers.

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NATIVE GRASSES

BARB WIRE GRASSES

by Andrew Briggs, Wellington, NSW.

This warm season perennial grass was once highly regarded as a grazing species, but is now thought to have little value. In 1898, JH Maiden wrote in his *Manual of Grasses, NSW*: 'It is an excellent grass, nutritious and palatable and making good growth . . .'. Its distribution extends throughout eastern NSW into Queensland, and as far south as north-eastern Victoria.

It is most commonly found on roadsides or similar areas where grazing is limited or properly regulated. Barb wire grass (*Cymbopogon refractus*) is easily identified by its very distinctive seedheads which closely resemble barbed wire. Growing to around 60 centimetres in height, the plant produces useful feed during

spring and early summer.

The leaves and stems of this plant are highly aromatic, giving out a lemon scent. Indeed, it is closely related to the lemon grass commonly used in Indo-Asian cooking.

Another species of *Cymbopogon* found in the drier regions of central west NSW is *Cymbopogon oblectus*, or silky heads. This plant is named after its spectacular, silky seed heads, making it a much desired plant in low-water-use native gardens.

Due to the fact that this species is not commonly found growing in either large numbers or reasonably pure stands, it is difficult to obtain large quantities of seed without significant contamination from other less desirable species.

Cymbopogon refractus



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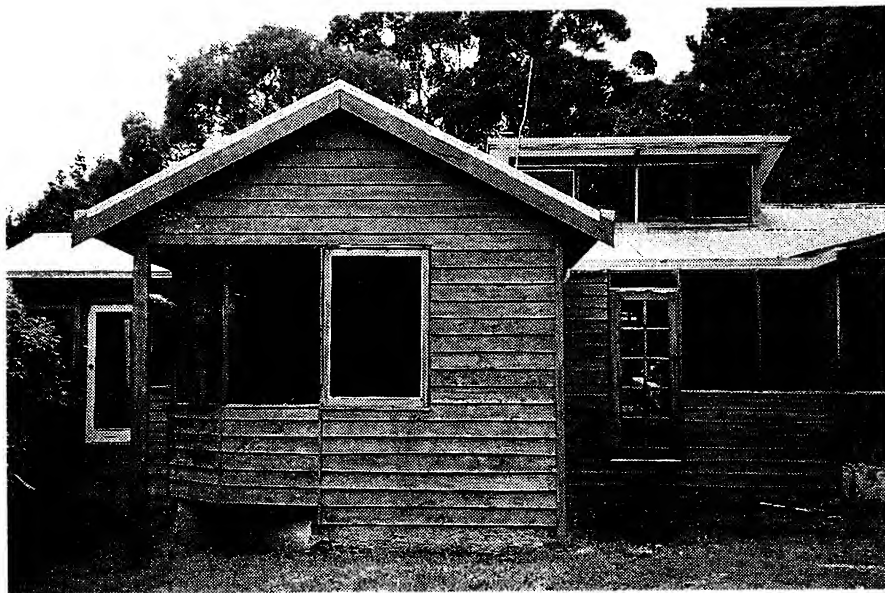
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MUDDLING ALONG



by Chris Wilson, Alice Springs, NT.

This is the story of my experience with working with mud and the technique of mudpuddling that evolved over quite a few years of trial and error with earth construction. We had bought a little yellow fibro and louvre unsolar construction in the Channel region south of Hobart in 1973 and over the years renovated and replaced virtually the whole building. It would have been much easier with the benefit of hindsight to have started fresh and built a new house.

Certainly with regard to aspects such as low impact appropriate solar design and technology it would have been much easier to incorporate from scratch rather than try to adapt a poor original design to these lofty ideals, especially as our forefathers seemed to show no knowledge or appreciation of these things. Perhaps simple shelter was of a greater priority at that time. Nevertheless, I became interested in utilising some of these ideals, especially the principles of passive solar design, mainly to try and provide a more comfortable home for less ongoing cost, and also in an attempt to be responsible about the amount of energy that was used. I started reading some articles and books on earth construction many years ago and was impressed with the list of advantages

ADVANTAGES OF EARTH CONSTRUCTION

Dirt, clay or soil are readily available materials, are often waste products of building preparation, and there are obvious benefits in minimising transport costs and energy input as well as reduced raw material costs from utilising these local materials. Earth walls possess a high 'heat mass', along with other materials such as concrete and solid brick.

The concept of heat mass refers to the specific heat property of the material, which basically is the ability of a material to store and retain heat. A material with a high heat mass, such as most metals, water and to a lesser extent earth, can store large amounts of heat. Typically, they also require relatively large amounts of heat to produce a temperature rise in comparison to materials with a lesser heat mass. The purpose of this explanation is to highlight one of the most outstanding aspects of earth as a building material, that is its ability, if designed along passive solar principles, to help regulate the internal temperature of the structure. In a colder climate passive solar design allows the sun to shine on exterior or interior walls, which, if built of mud, will store the heat during the day and release the stored heat dur-

ing the cooler night. In a warmer climate, or during the summer in colder climates, sheltering the walls from the direct sun prevents direct heating and the earth walls absorb room heat during the day, promoting a cooler environment during the day and warmer at night.

There is also the very responsible idea that once the building had done its job it would simply return back to its original state – the earth. All with minimum effect in the meantime in terms of pollution, energy and resource use. Finally, millions and millions of the world's people live happily in earth houses and I believe that it is more and more up to us in the so-called advanced nations to show a lead, housing ourselves in a way that meets our needs but which uses precious energy and resources in a more responsible manner.

A DEVELOPING INTEREST

The disadvantages I will go through later, but firstly something of my history of working with mud. I became more interested in earth construction, but unfortunately my views weren't shared by the rest of my family, especially my partner, and so extensions were of brick pier construction, wooden frame, celery top pine weatherboard cladding. While building these extensions I saw the opportunity to embark on my earth-building career without causing offence to the rest of the family.

The piers were in place for a new bedroom and the pier height on a gentle slope ranged from about 300 mm to about 1500 mm on the downhill side. As usual, I was attempting to do as much of the work as possible in an effort to reduce costs, and as I was a poor bricklayer had decided to leave the brick piers open and not form a wall. As I was working, there was a large pile of clay left by the backhoe and I still had some cement left over from the pier footings. I looked at these things and the brilliant idea of building earth walls between the piers to seal the outside of the understorey occurred to me. There were certainly advantages to doing this: the house would be warmer by keeping still air under the house, pests and other unwanted guests such as snakes would be discouraged by an effective barrier, fire hazards such as leaf litter would not be able to build up,

and the sparks etc during a bushfire would also be excluded.

THE FIRST ATTEMPT

Rammed Earth

Excited by this idea I pressed ahead. All the raw materials, a pile of clay, a bale of hay and timber planks for forms were present, but I did have a deadline to adhere to. Mudbricks need much preparation and curing time, adobe was a process I was not really familiar with at that stage, so rammed earth seemed the most appropriate method.

I had a large 200 x 200 mm block of Oregon, fitted a broomhandle to it to use as a tamper, prepared forms of 200 x 50 mm hardwood on spacers of 25 mm dowel, raided some hay from the chookpen and started work. I used the brick piers as an internal measure between the plank forms, and used the 25 mm dowel with removable pins that could be fitted outside the forms as a means of preventing the forms from spreading. Four 25 mm holes were drilled through the two forms to accommodate the dowel spacers.

This was based on a simple technique I had read about that had been used by Chinese earth builders for thousands of years. They typically used square bits of wood that fitted through square holes in the plank forms. Removable wooden pins were put through holes in the square piece of timber outside the forms and held them in place at a controlled width. Once the rammed earth wall reached the top of the form, the pins were removed, the forms also removed and then reassembled on top of the wall all ready for another layer.

After an hour and a half of work, I was exhausted and had a wall about two metres long, between the first two piers and about 50 – 100 mm high. I pondered the situation, looked around, noticed the cement mixer, looked again at the forms and decided that mixing mud, straw, water and a little cement all in the mixer could well be quicker. It proved to be a much faster process, though the cement mixer was by no means ideal, as the clay would stick to the sides as well as to the angled agitators within the mixer bowl. Still, things progressed at a fairly impressive rate and I had all the walls built, about 30 metres in length in total by the time the

floor joists and bearers were framed up.

I soon found, especially after the cement mixer motor caught fire for the third and final time, that mixing the mud mix in a wheelbarrow was easier and faster, and that it was easier to control the quality of the mix. What was needed for this process was fairly sloppy mud mix, about a 15:1 ratio of soil or clay to cement, a good two handfuls of the herbal forest mix (below) and water. It was important to mix all the ingredients well and this is what took the most time. It was often beneficial to leave a mixture to stand for a few minutes before turning it over once again; that allowed the more solid particles and clumps of soil or clay to absorb moisture and they would then be easier to break down. Two barrows was a good efficient way of doing things as one could be standing as the other was being mixed. Most of my mudwalling has been done with just one worker, efficiencies increase with more workers.

The mud mix was then just shovelled into the forms and it was important to perform some sort of agitation to remove air bubbles. This could be achieved by either tapping the sides of the wooden forms, or by spearing a vertical spade through the mud mix in the forms.

It didn't seem to make much difference to the finished product whether clay or soil or a mixture of the two was used. In fact, I deliberately varied the mixtures of clay and soil as I went along from wall to wall between the brick piers, from 100 percent clay to 100 percent topsoil with gradual increments on the way. This is reflected today by a gradual variation in colour from a yellow to a dark brown.

These walls were simply laid on the ground, with no foundations, a point that caused some concern with the council building inspector, but he was reassured when it was pointed out that these walls were simply fill between the brick piers which provided the load-bearing structure. I explained that if they failed I would simply dig them up and cart them away.

The Magic Component – Native Herbal Forest Mix

Several other innovations also occurred during this first attempt at earth building, usually through necessity. Once I had run out of hay I pondered on the

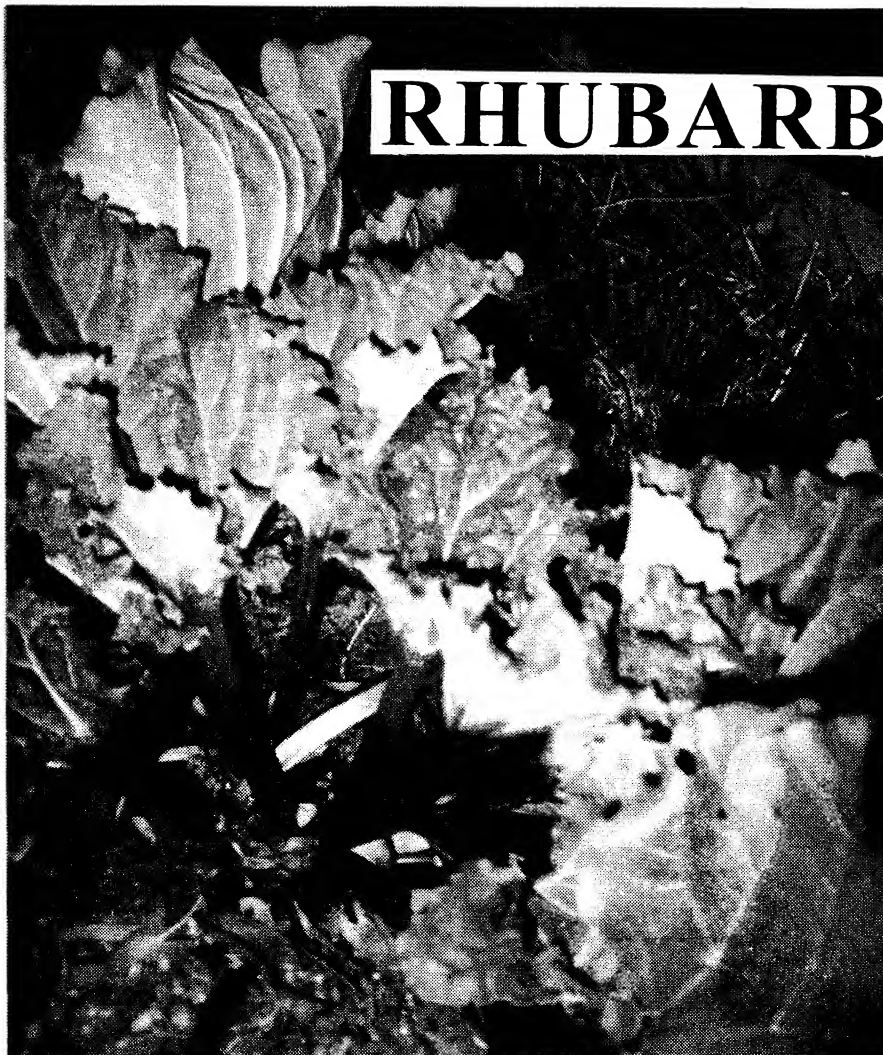
use of fibre, realising that it was a crucial aspect of earth wall construction, in much the same way as the glass fibre is in fibreglass construction. Hay had traditionally been used, but had its problems in that it typically contained lots of seed, including weeds. Straw is a much better product in this regard, but I had a definite sense of a remnant cultural cringe from our Pommie and European ancestors.

After many years of building and frequent mistakes, I was intensely interested in doing a job that did more than one thing at once. That was part of the original idea of using this earth construction in that the pile of clay had to be moved anyway and what better way in which to move it than by building a wall out of it that would provide other valuable uses. Well, it was the same with the incorporation of the native herbal forest mix into the earth wall construction. Under all trees and bushes, and indeed in all gardens, vast amounts of leaf litter accumulate, and this mix, also a useful compost ingredient, is now an essential component of my earth walls, and provides a strong Australian flavour (and scent if eucalyptus leaves are used) to the process. All that needs to be done is to rake up leaf, twig and bark litter, a process that cleans up the garden and reduces fire hazard at the same time. The coarser twigs and branches can be removed and provide excellent kindling for the fire or barbie, and the resultant herbal forest mix is far cheaper and much more culturally appropriate than any bale of straw or hay.

Did They Work?

These original walls were built nearly ten years ago now, some of them facing the prevailing westerly weather at Oyster Cove, and have endured the conditions well. It was quite common for large cracks to appear in the walls as they dried but this was easily remedied by simply rubbing more mud mix into the cracks. This was also the technique for filling in the holes left in the wall by the dowel spacers. There appears to be no difference at this time between the weathering ability of the varying components of the walls, from all clay to all topsoil.

In the next edition of GR I'll describe my rewarding new developments in the art of mudpuddling.



RHUBARB

by Ann Cliff, Hill End, Vic.

manure should be added to the hole before planting.

Plant the crowns out a metre apart in spring or autumn and mulch well. Rhubarb likes plenty of moisture and you will need to water it during the summer. The only time I have lost rhubarb plants was when they were not watered in a drought, under normal conditions they will keep producing for many years.

My liquid comfrey fertiliser, made for tomatoes, has a wonderful effect on the rhubarb. Comfrey leaves are immersed in water for two or three weeks and although the smell is vile, the result is a fertiliser high in potash.

There are few pests and diseases which affect rhubarb. In the photo you may see that the leaves have been attacked. I wonder how the snails felt after their meal, laced with oxalic acid.

The first year after planting, don't harvest your stems as this will weaken the plant; never take them all, because rhubarb needs some stems to regenerate. In some years you will find the plant running to seed and gardeners always snap off the seedheads as soon as they appear.

Harvesting rhubarb is a skill which needs no knife. Don't cut the stems to leave a wound, but feel for the bottom of the stem with your fingers and pull out with a twisting movement from the base of the plant.

Make sure that your rhubarb plants are well fed with organic fertiliser and they will need very little attention.

USES

The stems are always cooked before eating. If you try one raw, you'll find out why – they are very acidic and need a little sugar or honey. Rhubarb pie is an old-fashioned country dessert and one of my mum's favourite puddings was rhubarb crumble, served with custard or cream.

These days, I cook the rhubarb gently with brown sugar and a little orange juice until soft, then thicken it with cornflour, chill and serve with yogurt.

Bright pink sticks pushing up through the soil in spring once provided the first 'fruit' of the season for our hardy settlers. They had brought with them rhubarb, the homely plant of cottage gardens. And although we are lucky to have a much wider range of fruit than they did, rhubarb can still be a useful addition to the permaculture garden.

Rhubarb was introduced into Britain from Russia and has been cultivated ever since 1573. Chinese rhubarb (*Rheum officinale*) was called Turkey rhubarb and used as a medicine.

This plant is a member of the dock family, used by herbalists as 'excellent for the blood'. The sharp taste of rhubarb stems, the part eaten, is caused by the oxalic acid content, which is a tonic in small quantities.

Too much oxalic acid is poisonous and rhubarb leaves are toxic because of their high acid content. Although

they can be added to the compost heap with no ill effects, they should never be fed to animals. To turn the poison to good use, you can boil rhubarb leaves in water to make an insecticide which kills greenfly.

The stems of rhubarb, when young and tender, can be used in a variety of fruit recipes and are more reliable than orchard fruits, especially in cold climates.

GROWING

We have grown rhubarb from seed, but the easiest way to start is with three or four crowns: roots with stem buds attached. Three or four plants will provide quite enough rhubarb for a family and will probably give you a surplus to swap for something else.

Rhubarb likes an open spot and will grow in almost any soil, provided you feed it. This means that a generous helping of good compost or rotted

Rhubarb makes an excellent jam. I make a jam with rhubarb and fallen oranges, or with ginger as follows:

Rhubarb and Ginger Jam

1.5 kg rhubarb, wiped and chopped into pieces

1.5 kg sugar

juice of 3 lemons

25 g root ginger

Place the pieces of rhubarb in alternate layers with the sugar in a deep bowl, add the lemon juice and leave for about eight hours. Put the contents of the bowl into a pan, with the bruised ginger tied in a muslin bag. Boil rapidly until it sets on cooling. (To test for setting, put a spoonful on a saucer and place in the fridge for a few minutes. When cool, jam should not run off when the saucer is tipped.)

Pour into jars and seal while hot.

Rhubarb Sauce

2.5 kg rhubarb

equal weight of chopped onions
peppercorns, chilli, mustard, curry powder, root ginger, to taste

1.5 lt malt vinegar

1.5 kg brown sugar

Put the chopped rhubarb and onions in a pan with the flavourings and vinegar and simmer for two hours, stirring frequently. Rub through a sieve and return to the pan with the sugar. Boil until the sauce is like a thick cream, then bottle and seal while hot.

Rhubarb wine can be made with a white wine yeast, adding lemon rind and sultanas as well as sugar. My rather medieval hit and miss wine making was often successful with rhubarb.



RELIEVE ACHING MUSCLES

Add a cup of salt and a cup of vinegar to a warm bath and soak yourself for a while!

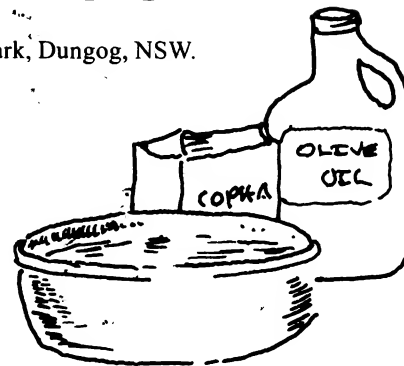
SIMPLE SOAP

by Georgina Clark, Dungog, NSW.

Readers frequently ask for soap recipes so I'm passing on a recipe which works for me. I haven't bought soap for several years.

- 1 packet cophia
- 1 packet Frymasta
- 1 cup olive oil
- 1/4 cup caustic soda
- 2 cups water
- clean plastic bucket
- empty milk cartons
- your choice of fragrance oil

Place the water in the bucket and pour in the caustic soda. Swirl to mix. Heat will be generated, and fumes, so leave to cool in a well ventilated place. Gently heat all the fats and oils until melted and leave to cool. When both mixtures are about the same temperature, slowly pour the mixed oils into the bucket, stirring until combined, then stir constantly until the mixture thickens and becomes opaque like custard. The time needed for this will vary, but it usually takes from 20 to 30



minutes. As soon as the mixture thickens, pour in your fragrance oil a little at a time, stirring, until the fatty smell of the soap is masked and the fragrance predominates. I don't like my soap to be too strongly scented, but it is a matter of choice. Pour mixture into milk carton/s and leave for three days to set. Then tear off the carton and cut the soap into cakes. I've made up a cutter similar to a cheese wire, with wire and large buttons on each end, which makes it easier to cut the soap. Leave the raw soap for two to three weeks to cure before use.

HANDY HINTS FOR MAXIMUM INSULATION

The following tips will help you get the best possible performance from your insulation.

- Do not compress bulk insulation. It must retain its normal thickness wherever possible.
- Make sure corners of ceilings, walls and floors are properly insulated. These are areas where heat leaks are often found.
- Always keep bulk insulation dry.
- Have your wiring inspected by a

licensed electrician to ensure that it can be safely covered by insulation.

- Do not install insulation within 90 mm of hot flues or exhaust fans.
- Do not put insulation over or around recessed light fittings. Leave a 25 mm gap around perimeters.
- Avoid gaps in the insulation. Even if only five percent of an area is left uninsulated, up to 50 percent of the benefits may be lost.

Source: *Energy Efficiency Victoria News*, Mar '00



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ROUND THE MARKET PLACE

We hope you enjoy this feature introducing new products relevant to readers' lifestyles and interests.

USEFUL SINK HOSE CAN SAVE WATER

The 1.5-metre-long sink shower hose is easily fitted to laundry, kitchen or bathroom taps to vastly increase convenience. The water-economising chrome nozzle has two flow streams, jet and shower, via a simple switch. The sink shower hose is ideal for washing pets, bathing baby, shampooing hair, rinsing vegies, watering plants and filling buckets. There's an extra attachment to fit the unit to a garden tap and a flow reducer bar that can be pulled back or forward to adjust flow as required.

For more details, contact: Handi Home Supplies, 50 Longview Court, Thomastown 3074. Ph: 03-9466-1611.

REACTIVE PHOSPHATE ROCK (RPR) FERTILISER

Duraphos granulated RPR is an organic soft phosphate fertiliser which is highly reactive in acid soils. It is not water-soluble and contains 90 percent of Gafsa phosphate rock. It consists of phosphorus in a sustained release form, combined with readily available phosphorus and can be bulk blended with other products. This form of phosphorus enhances the root growth during the early stages of the crop, which in turn improves the utilisation of phosphorus. The calcium carbonate content of Duraphos is also good for countering soil acidity, while sulphur is included to reduce sulphur deficiency. The combination of these natural minerals means plant uptake of phosphorus is increased in areas where the pH level of the soil is mid to low and has a high moisture content.

Contact: Fertico Fertilisers on 1800-641-653, or Box 63, Elizabeth 5112.



TRANSPORTABLE SPINNING WHEEL

The Ashford Joy spinning wheel is a handy way to ensure you can easily take your spinning with you wherever you go. It can be simply folded away when no longer needed. Bobbins, flyer and treadle can be left attached; just fold up the base. A special padded carry bag is available and silver, carders and niddy noddy can be kept in the spacious outside pocket. Made of golden timber veneered board with a

lacquer finish, the Joy comes assembled and ready to go, and is good for spinning all kinds of yarns.

Contact: Ashford Australia, Travellers Rest, Snowy Mountains Highway, Cooma 2630 for more information, or get in touch by phoning: 1800-026-397 or emailing: dearch@cooma.snowy.net.au

HEALTHIER LIVING WITH LIVING JUICES

High-speed conventional juicers produce heat and friction, which kill off many beneficial enzymes. The new Oscar juicer has been designed to operate by a unique squeeze-and-crush process, which produces both 70 percent more nutrients than

conventional juicers and at least 30 percent more juice. With the Oscar, the juice does not deteriorate nearly as rapidly as conventional juices so that living juices can be stored in the refrigerator for up to 48 hours without a reduction in flavour or nutrients. This juicer can also be used to make frozen fruit treats, pasta and noodles, baby foods and purees, and is quick and easy to clean after use.

For more details, contact 1800-802-924. If readers mention this *Grass Roots* article when they order their Oscar, they will also receive a set of Dr Norman Walker books that usually retail for \$126. Vitality 4 Life, 13 Terrace St, New Brighton 2483, or email info@livingearth.com.au

VERSATILE INVERTER/CHARGER FOR ALTERNATIVE POWER SYSTEMS

Two sine wave inverterchargers have been specially created to simplify system design in applications such as mains backup systems, remote area power systems, boat and motor homes. One offers a 1300W continuous output unit with 12V input, and the other a 2200W continuous output with a 24V input. Both feature an easy-to-install, compact space-saving design, and greatly improve the interaction between the inverter and mains/generator of any power system. Both units include an integrated three-stage, fully adjustable, 80A battery charger and 40A AC transfer switch. The AC transfer switch automatically connects the load to the mains or generator when present, while the inverter takes care of the battery charging.

Contact: Solar Energy Australia, 4 Beaumont Road, Mount Kuring-Gai 2080. Ph: 02-9457-2277.

CASTING POUCH WORM FARM

You could dispense with the standard worm farm and adopt this easy 'permanent residency' method. The casting pouch is a tube made from shade cloth. Red or tiger worms are put in the pouch together with organic waste, and the pouch is placed in a shady spot and moved from plant to plant as required. The worms travel freely between pouch and soil beneath as the bag is replenished, and find their ideal temperature and moisture level for breeding and feeding, but always stay near the food source. Castings and liquid nutrients seep steadily into the soil and the pouch requires little attention. Trees respond well to this no-mess method and the casting pouch does not attract insects. It works well with large ornamental pots too, and can be left unattended for some time.

Contact: Jenny Holder, 2 Adina Road, City Beach 6015, or ph: 08-9385-9595.

POROUS SEDIMENT CONTROL SYSTEM

EnviroBerm Porous Sediment Control System is designed to replace hay bales and silt curtains currently used as water retardants, but which generally create erosion around the barrier. EnviroBerm panels are porous and allow water to spread and pass through at a reduced velocity (up to 74 percent) which, in turn, reduces the energy of the water (by up to 85 percent) so that silt can settle and remain in the waterway. Vegetation can be encouraged in the drain channel and forms a natural silt trap once established. The panels can be reused and handle over eight percent grades, while not blowing out with extreme flow volumes or speed. EnviroBerm is simple to install and easy to maintain with no heavy machinery required. It conforms to irregular ground with ease and is ideal for disturbed sites, channels, roads and slopes.

Contact: Cascade Distribution, PO Box 578, Benalla 3672, or call 03-5762-7822. Alternatively, email jascott@cni.com.au or visit the website on www.cascade.ab.ca

Recent Releases

On this page we present information about newly published books that may interest readers, with details of prices and publishers. Titles described can be ordered through your nearest bookstore.

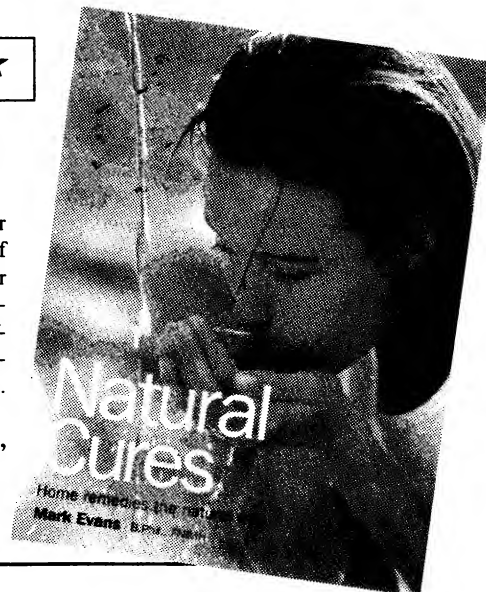
★ FEATURE TITLE ★

NATURAL CURES: Home remedies the natural way **Mark Evans BPhil, FNIMH**

This large glossy colour publication guides readers through a broad range of disorders and wholistic solutions to them. Remedies utilise four modalities: aromatherapy, herbalism, homoeopathy and naturopathy. Each is explained, together with well-illustrated instructions for making decoctions, infusions, tinctures, creams and so on. The appendices are useful and outline plants, herbs, remedies and their benefits. The section on children's ailments is partic-

ularly interesting, and other sections cover illnesses or conditions for different parts of the body and the respective remedies for each modality in some detail. The often-illustrated insets provide additional self-help tips including massage, or more background to the issue under discussion.

P/b, 128pp, Southwater, Macmillan Education Australia, 627 Chapel Street, South Yarra 3141. Ph: 03-9825-1025. RRP \$14.95.



DON'T DIE IN THE BUSH:

The complete guide to Australian camping
Sven Klinge and Adrian Hart

This is an essential guide to being thoroughly prepared before stepping out into the Australian bush. It covers every aspect of going bush: necessary equipment, basic and advanced camping techniques, health and safety, preparation for activities/thrills, camping laws, Australian campsites, camp cooking, navigating, descriptions of dangerous animals and plants and camping contact details.

P/b, 132pp, New Holland, 14 Aquatic Drive, Frenchs Forest 2086. Ph: 02-9975-6799. RRP \$21.95.

THE STENCIL COLLECTION

Traditional Borders – Maggie Philo Folk Art – Katrina Hall
Both these books form part of The Stencil Collection series. These are practical step-by-step guides to stencilling and assume no prior knowledge. Basic materials, design planning and the different effects of surfaces and paints are thoroughly explained before six projects are illustrated and outlined in detail. The effects and colours are quite stunning. There are several other titles in the series, each one including six pages of ready-to-use, reusable stencils.

P/b, 32pp, Murdoch Books, 45 Jones Street, Ultimo, 2007. Ph: 02-9692-2339. RRP 12.95.

GLOBAL SPIN **Sharon Beder**

This is not a book you will enjoy, or even one you will want to read, but it is essential reading for anyone interested in the environment. It details the ways in which big business interests are undermining the environment movement. Tactics described range from intimidation and law suits to use of front groups, manipulation of the media and greenwashing. It is an intense and often disheartening read, but one that will give new insights and allow more critical judgements of the 'information' we are constantly being bombarded with.

P/b, 336pp, Scribe Publications, PO Box 287, Carlton Nth 3054. Ph: 02-9550-9207. RRP \$29.95.

HELPFUL HOUSEHOLD HINTS

June King

Helpful Household Hints has dubbed itself the '90s guide to house-keeping', and certainly takes a thorough approach to caring for the home. Cleaning, arranging, maintaining and organising the household are all covered at length. This has been written for an American audience by a woman who appears to be extremely house-proud and ruthlessly efficient. The information is organised into twelve chapters covering parts of the home or related issues, with text presented in bite-sized pieces under subheadings. While there are some good ideas, be warned that some aspects of this guide are unlikely to be relevant or add value to *Grass Roots* readers' knowledge. For example, the section on recycling and saving water is elementary, and some practices/concerns are dubious – does anyone have a 'garbage disposal unit'?

P/b, 222pp, Santa Monica Press, Boobook Publications, PO Box 163, Tea Gardens, 2324. Ph: 02-4997-0811. RRP \$25.95.

MULTIPLE CHEMICAL SENSITIVITY: A Survival Guide

Pamela Reed Gibson PhD

This is a very thorough, well-referenced, academic – but supportive – exploration of this 20th century phenomenon. Thoughtfully, the book is printed on acid-free, elemental chlorine-free paper, using soy-based ink so those with multiple chemical sensitivity (MCS) can read it without risking their health. The author, a US-based researcher, looks at suggested physical and psychological causes, and the huge impact MCS has on sufferers' lives. Physical issues (like fixing up the immediate environment, traditional and alternative treatment options, and food) have been researched, evaluated and covered in detail, as are psychological issues (like acceptance, identity, support and finding ways to move on). Gibson also touches on the important areas of disability, politics and activism, which are likely to be part of a long-term recovery.

P/b, 375pp, New Harbinger Publications, Boobook Publications, PO Box 163, Tea Gardens 2324. Ph: 02-4997-0811. RRP \$33.95.



DOWN HOME ON THE FARM

by Megg Miller

Well, the snappy writing of last issue is a hard act to follow. Suni wrote it 'just for fun'. She should really have been doing something else, she confessed, writing that was rigorous and accurate. She needed a breather and out popped her racy 'Down Home in the City'. I enjoyed it and it's obvious from readers' comments you all delighted in it. It was rather pleasant as well having one less deadline.

I feel rather a fraud writing this issue, more of my time has been spent at work, writing or attending to business responsibilities. 'Camping Down at the Office' would be a more apt headline. I'm exaggerating, of course. I'm around the farm and doing chores every day because there are jobs like feeding and watering that have to be done. Neither the dog nor pig would forgive me if I missed their meal. I suppose I'm acutely aware that the grass is starting to get away and the turkey sheds offend me, so badly do they need cleaning. The polyanthus are almost in flower, which is lovely except they are still in pots waiting to be transplanted. I'm hoping the office work will tail off enough before spring so I can tackle long-overdue yard jobs.

What's on my mind is the vegie garden; the fully covered, state-of-the-art, much desired creation. Broad bean sowing time is long past, so it looks as though I have another year's wait before I enjoy my favourite beans again. They're not a vegetable you can buy, they deteriorate so after picking, and even those generously shared by friends are often limp and tired by the time they go into the pot. Last year I got them in very late and an early hot spell knocked them so badly the growing pods withered on the bush. I was going to try sowing this weekend, but the only seed packets available locally were for tall, slow growing varieties. Allowing the necessary eighteen weeks, it would be November before maturity. Next year I'll have to keep a weekend in May free and ignore the goings-on of the world and just get the little seeds sown.

Aside from weeds growing and an array of trees in tubs that should be transplanted in winter, there are a couple of cauliflowers that should be per-



Part of the goose flock hiding down near the dam.

fect for picking right now. One was just about ready when I last visited the garden, but it was small and looked as though it could go another week without spoiling. More than a week has passed and I'll be hopping mad if it's past its prime. The garden is supposed to help feed me. What surprised me last visit were the capsicums and Tom Thumb tomatoes – they were still flourishing despite it being July. The capsicums had stopped growing and the fruit were showing signs of deterioration, but there were branches from the Tom Thumb bushes nearly two metres long and still bearing little red tomatoes. It was fun picking them at such an unlikely time, the combination of the shade cloth roof and a protective shrub assisting them to withstand some quite vicious frosts. Unfortunately, there were a considerable number of old, rotting tomatoes in the grass outside the garden and if they show even a fraction of the parent plants' vigour a forest of seedlings can be expected. I planted two bushes this year and that was ample. They would, no doubt, have benefited from judicious pruning. Next year's seedlings will doubtless go somewhere on their own with a trellis to meander over. On second thoughts, one well fed, well watered Tom Thumb is capable of inundating a person with mini tomatoes. What on earth will I do with the anticipated seedlings?

It is pleasing to see garlic shooting in disciplined rows, and tree onions as well. Not that the latter will stick to rows for long. Years ago I had tree onions growing everywhere. Their ability to reproduce and widely fling the tiny bulbs that grow from the flower head was truly awesome. One way and another they died out; it sounds unlikely but not a bulb has shot these last few years. I snaffled some up at a summer market, then Mary owned up to still having them growing and brought plants in. Hopefully I've ensured a permanent future for them. My father grew zillions of them; in fact he grew all our onions for the year and I have fond memories of tree onions dangling down through the wire netting on which they were stored in the garage ceiling. Let me say that nothing gets into the new vegie garden, probably not even desirable insects, a pity, but, once bitten and bitten again and again, and pecked and scratched, well, drastic measures are put in place. Fort Knox won't let anything in. To date, the daunting weeding has even kept the lovely Sunshine out.

Actually, Suni and Marcel have helped out on several occasions, Marcel mowing and Suni laying down paper and pea straw. I'm fortunate that Suni's eyes have been on terracotta pots and as I plant out their contents she happily takes them. There is insufficient room in her backyard for vegies, though the number

of herbs and flowers is becoming astounding. If I buy a culinary herb now it's easier to purchase two pots, as promises of sharing the plant when it becomes established are no longer acceptable. She can't wait that long. During our last visit to the nursery the fruit trees and berries were on display and we walked through them shouting 'Look at this,' with great excitement. (Suni has her heart set on a crab apple and is a bit sniffy that we didn't pick one up when haunting nurseries recently.) What was meant to be a quick look and a cup of coffee resulted in a marathon afternoon shopping, her credit card refused to work and the vehicle was so full with plants and hardware items we could have put a sign on the door – 'Miller's Nursery' – and looked totally believable. The crab apple? We're still looking. It's just as well I'm not trying to grow vegies in my old garden at home.

Very early each morning, too early for me to even open my eyes, pitapatting can be heard around the verandah. It wasn't until a raspy crow was emitted weeks after it commenced that the culprits were identifiable – a motley clutch of young fowls that had been raised around the back of the house. They think they own the place and stroll around indolently or stretch out on the verandah in the sun. The verandah boards bear witness to these fowls and have to be carefully negotiated in bare feet. The group's days are numbered, the boys will go off to a friend's baking dish and the girls probably be sold. Earlier this week there was a clucking bird amongst them, cause enough for apoplexy. No more chicks – please, certainly not crossbreds.

As the hens have returned to lay their eggs have hardly touched the nest before I've claimed them. A few teenage eggs have been appearing amongst the large ones, a sign the pullets are commencing duties. These eggs are all shapes and sizes and appear in quite strange places. Given a few more weeks the hormones will have settled down and the pullets will be old hands. The clucking chook on the verandah was a pullet, so she's obviously stolen a march on me and made a nest under the house where it can't be raided. Time to dust off the broody cages and catch these early birds before their eggs hatch.

Recently I had to catch and sex some geese. Usually I can differentiate the ganders by their voices, but these were the last hatched and still a trifle adolescent. They would have to be vent sexed. No private parts were visible under all the feathers, so I sat down on the steps of the old office to do the task more thoroughly. Totally engrossed in what was appearing to be an unsuccessful venture, I hadn't noticed the audience. Nine turkeys surrounded the steps, their necks stretched out. They were absolutely burning up with curiosity. Totally silent to this point, they broke out in loud discussion and huffily retreated when I laughed at them. For all the success I had at vent sexing, one of them could have had a try. You can say turkeys are silly but I've never found them stupid. Cunning, naughty and mischievous yes, but stupid? Never!

The geese are out of hand, I can't deny it. They've taken to lurking around near the dam of a morning so they can't be put into the big paddock, straggling back for breakfast just as I'm leaving for work. There isn't time to go down and round them up or put up with the shenanigans. It's been too wet and muddy under foot to yard and catch them. Poultry acquaintances desperately seeking the breed have lost faith they'll ever get birds. Once this issue is off, rain, hail or more mud, geese will be sorted and sold. The species can reproduce alarmingly – read the Feedback letter from D Henderson of Traralgon. This person has my total sympathy. These cunning, conniving creatures are difficult to catch. One glimpse of my large fishing net and the flock closes in so it's impossible to find Spotty, Dotty and Watty. The appearance of a man in the driveway has the same effect; men always mean catching. D Henderson may not feel so bad to learn that I have more than three times their flock size. Hopefully not for long, but beware of strangers bearing gifts of ganders. The fishes and loaves story will pale against the outcome of another year's reproduction.

It's wonderful to be able to round this off with the news that the mice have gone. No smelly droppings, no scurrying or rattling in corners. Sure there are a few out in the shed, but it's so cold they would rather starve in

their holes than venture out. Mice really don't like the cold weather. Life then should be sweet. It is good, but there is an off-putting smell to be dealt with. Just the usual bit of a whiff, but no clear-cut location. I've considered a possum, but they've also been quiet of late. I know why now. One or two have chewed a hole through the old office wall. I walked in one night recently to put the lights on (the geese like to eat their dinner by fluorescent light) and totally surprised a miserable, dirty looking fellow. I leapt like a locust and had him by the tail in a flash. He's been given the chance to reinvent himself at a friend's bushland reserve. The books were scattered willy-nilly in the old office this morning, I'm going home to set traps tonight. What do other people do in their leisure time?

PENPALS

Pen friends appreciated by 72 year young male. Interests: art, sculpture, writing, organic gardening. Enjoy: music, watching birds, early morning walks, sunrises, sunsets, cosy fires, nice company, good conversations. Happy positives without baggage please write.

K Connell

61 Tarean St, KARUAH 2324.

I am 14. My name is Eliza. I love animals, especially horses. I live in Tasmania. I love the bush and country music. I would like penpals who are between 13 and 15 years old, boy or girl. Looking forward to hearing from you!

Eliza

C/- PO Box 117, SEYMOUR 3661.

Hello! My name's Melanie. I play the trumpet and the violin and I'd love a girl penpal between the ages of 10 and 12. I like reading, writing, spelling and I love school holidays! I play netball and I love it. Art is my favourite subject at school. I'm against animal cruelty and I have a dog and a guinea pig. Please write to me, I'll answer all letters!

Melanie

C/- PO Box 117, SEYMOUR 3661.

Hi, I'm 16 and love art, music, swimming, yoga, going to the movies and walking my dog. I'm looking for a penpal between the ages of 16 and 22, any gender. So if you'd like to, write to me! My letter box is starving!

Karen

C/- PO Box 117, SEYMOUR 3661.

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HOW TO ADVERTISE

Use the form provided below, or a separate sheet of paper, to print your advertisement clearly, **not in block capitals**, including correct punctuation. If you have more than one ad please print each one on a separate page. Remember to include an address or phone number in your advertisement. Count the number of words and multiply by 85 cents per word (phone number counted as one word) to work out the total cost of your advertisement. Send **with payment** to Grass Roots, PO Box 117, Seymour 3661, before the deadline and we'll include your advertisement in the next issue of Grass Roots. **Deadline for GR 141 is 30th August, 2000.** Please do not fax ads.

Sender's Name For issues no/s
 Address Classification
 Postcode Cost

Cost for advertisements is 85c per word

PROPERTY FOR SALE

NEW SOUTH WALES

FARM COTTAGE, 1/2 hr Tweed Heads, 10 mins beaches/shops, scenic, ph, solar/generator, couple/single, \$130 pw. Ph: 02-6676-1304.

ONCE IN A LIFETIME OPPORTUNITY, natural open forest fronting onto perm flowing Severn River. No one will ever find you here, when you build your own hideaway overlooking the rocky rapids & large water holes of the Severn stocked with Murray cod, rainbow trout, brown trout, yellow belly, silver perch & bass. Located inland from Coffs Harbour/Grafton at Dundee near Glen Innes, NSW. Vacant 100 ac. \$85,000. Owner committed elsewhere, so you can just take over the payments (\$250 pw) & the property is yours. Ph: Howard, 02-6646-3733, Wayne, 0413-686-457.

MID NORTH COAST, 27 km west Wauchope, 31 ac, arable, river flats, irrigation licence. Attractive solid cottage, 1 - 2 b/r, s/c/heating, air-conditioned. Suitable bamboo, grapes, olives. \$197,000. Ph: 02-6587-1190.

FAR NORTH COAST, 25 ac, 13 km NE Kyogle on ridge. Spectacular views Border Ranges. Timber yurt, 2 sml b/rs, kitchen/living, bathroom, verandah. Solar/gas, Rotaloo. 2 x 2000 gal tanks, new pump, springs, f/trees, shed. \$125,000. Ph: Narelle, 02-6632-2255.

BISHOPS CREEK, 8 km Nimbin, 25 mins Lismore, 15 ac incl perm crk, beautiful valley. Cavity brick home, cathedral ceilings, solar power, gas fridge & stove, back deck superb, water tanks, Davey pump, generator, vegie garden. \$137,000. Ph: 02-6689-1072.

FAR SOUTH COAST, 40 ac on Murrah River, big perm swimming hole, river flats, surrounded by state forest, 20 mins to beach. Telephone, no power, 30 mins to Bega, 40 mins to Bermagui. \$85,000 ONO. Ph: 02-6494-0183.

BEAUTIFUL SECLUDED MOLE RIVER VALLEY, 150 ac, well fenced f/hold, great mountain views, 10 mins from Glen Lyon Dam, fishing, wildlife, Sundown Nat Pk, local nurseries. Comfortable furnished cottage, s/c/stove, HW, gas fridge, septic, ph, 240 generated power, 50 km Tenterfield, sealed rd. Ph: 02-6737-5405 AH.

SOLAR PRICE CRASH! See inside front cover.

LOW COST LAND SHARING, \$7000 per site, 80 sites, up to 2 ac each in 1640 ac property, 20 km north of Port Macquarie, mid north coast NSW. See other ad under 'Communities/Shares'. Ph: 02-6653-4601.

www.skyboom.com/goolawah.

NYBOIDA, 2 b/r mudbrick cottage on 75 ac. Dam, sheds, garden, well set up. \$120,000. Offers considered, must sell. Ph: 02-6649-4943 AH.

BULLDOG FRUIT TREE NURSERY, Tabulam, 227 ac, timber/stone home with lge verandah areas surrounded by lovely gardens & mixed orchard of 200 trees. A well laid out 3 ac nursery with overhead irrigation; capacity 80,000 5 lt containers; 50,000 grass trees in ground - great market potential. Six dams with 25 megalitres water stocked with large sized native fish. Self-contained cabin on bank of dam. Unfinished stone house, lock-up stage, with great views. A tremendous opportunity for home/business lifestyle. \$350,000 Ph: John, 02-6661-3588.

HOUSE AND LAND (20 ac) north NSW, charming 4 b/r w/board house set on 20 ac - lush r/forest on half & top fattening pasture other half. Ten mins east of Dorrigo, beside nat pk, 1 hr from Coffs Harbour, 30 mins from Bellingen, bitumen rd. Suit hobby farmer or alternative lifestyle, or fit retirees. Great community in this area. All services avail - schools, hospitals etc. POA. Ph: 02-6657-4165.

EUGOWRA, 1/4 ac, 2 b/r w/board house, o/fireplace, good soil. \$25,000 ONO. Ph: 02-6364-5087.

TOP SPOT - Best chance to own 3 - 4 b/r home on 4 shady subdivided blocks (1.5 ac). Good horse paddocks. Retire or raise a family. Views, privacy, beautiful wooded situation. Small but excel school in village of Copmanhurst 30 km W of Grafton. River close by. \$75,000 for house & 3 blocks. Ph: Mark, 02-6657-2980.

UPPER MACLEAY VALLEY, 35 ac, fenced; 5 b/r timber house; 3-bay shed; pig, chook, duck, goat, housing elec fencing; 3 sml dams; 30,000 tank water; combustion stove & hot water; ph & power; 50 mins west of Kempsey. Ph: 02-6567-1441.

Email: brakenridj@tsn.cc

DORRIGO, new listing, wood cabin on 25 ac. Crystal clear water, part clear magical r/forest & more, beautiful place to live. \$80,000 ONO. For info ph: 02-6657-8057.

MID NORTH COAST, 66 km NW of Macksville, 24 picturesque ac with solid timber & stone house & studio. A secluded haven - crystal clear crks, swimming holes, some r/forest, mtn views, estab fruit & nut trees. \$120,000. Ph: 02-6569-5737.

GRASSIFIEDS

PROPERTY FOR SALE

NEW SOUTH WALES

TARAGO, 100 ACRES of natural timber & bushland with abundant native wildlife. Large cleared private homesite with northerly aspect & views. Dam with lge catchment. Adjacent to power & ph. All-weather access, building permission. Tarago has primary school, store, service station, hotel, police station & railway station. Goulburn 40 km and 70 km from Canberra. \$75,000. Ph: 02-6291-9560.

CRYSTAL VALE NEAR TYALGUM, 30 mins to Murwillumbah, 8 green ac near Border Ranges, partly forested, landscaped garden, f/trees, fenced, irrigated ac for organic agriculture. Magnificent mountain views. Red cedar home, 2 b/rs, loft, polished timber floors, wide verandahs, c/port. Fully self-sufficient: solar system, 240V wiring, generator back-up, 2 x 5000 gal w/tanks, 1 r/water, 1 perm crk. Established, well run company title. \$120,000 ONO. Call owner, 08-8331-8805.

FAR NORTH COAST, 20 km from Murwillumbah, 1/4 share of 186 ac (mostly forest). Colorbond shed 6 x 6 m + verandah (insulated & lined), 5000 gal concrete tank + 1000 gal header tank, 2 dams solar power, gas stove, hot water & fridge, NE aspect, \$70,000. Ph: Kim, 02-6679-5434.

NEW ENGLAND TABLELAND, NSW, 100 ac Glen Elgin district, 41 km NE Glen Innes. Natural forest block with lge granite boulders & spring-fed crk. Gently sloping south to north & backing onto Butterleaf State Forest. All peace & privacy. \$41,500. Please ph: 07-5465-4091 after 6pm.

MID NORTH COAST, BELLINGEN, 15 ac, very private, backs on to state forest, beautiful valley with magnif 360° views. Ex-blueberry/kiwi fruit farm, 2 dams, access to pristine crk. Pumps underground irrigation to 400 blueberry plants, packing shed, lge coolroom, tallow wood pole frame home, 3 b/r, bathroom, en suite, WIRs & pantry, Cathedral timber ceilings & floors. Suit any dream. \$239,000 ONO. Ph: 02-6655-2419 AH. Email: Carolyn@raleighlighting.com.au

BELLINGEN/THORA, 1/4 share on a magnif 50 ac council-approved MO, congenial community. River frontage to pristine Bellingen River with fabulous swimming hole. Overlooks world heritage park. Property has rich alluvial flats and is BFA certified A-grade. Share incl a comfortable well insulated 3 b/r concrete home with verandahs on 3 sides and o/f/place. Huge shed with concrete floor, power, toilet & shower. Established orchards, fenced-in vegie garden as well as 1/4 share of 50HP tractor, slasher & various implements. One kilometre from state school, 5 km from Steiner school & 28 km from Bellingen, NSW. \$150,000. Ph: 02-6655-4020.

MID NORTH COAST, 40 mins Port Macquarie, 5 ac share of 200 ac, 80 yr old red mahogany house being rebuilt (liveable) approved. Geni, gas fridge etc, f/trees, community dam (lake), tractor. Much more. \$35,000. Urgent sale. Ph: 02-6585-1142.

DEADLINES: GR141 – AUG 30TH
GR142 – OCTOBER 30TH

MICHELAGO, 45 mins to Canberra. 450 ac, 3 b/r house, 3 room separate building, all in beautiful surroundings, lots of bush for privacy, running free range hens. WIWO. \$360,000 ONO. Ph: 02-6235-9008.

BOMBALA RIVER RETREAT, 30 mins Bombala & Nimmitabel, self-contained dwelling 70 m from river, solar power & water, 100 ac. Price \$100,000. Ph: 02-6458-5270.

VERY DESCRIBABLE UPPER HUNTER property consisting 3.42 ha (8 1/2 ac) of irrigated crk flats suitable for small horse stud, vegetable growing, cattle etc. Very comfortable 3 – 4 b/r home, dble garage, 40 x 20 workshop, 3 phase power, ph connected, 360° attractive views. Ideal alternative lifestyle only 12 mins to Scone by sealed road. Elderly couple need to relocate. Details and inspections contact: Wesfarmers Dalgety Townsend, 02-6545-1670.

NYMBOIDA, HOUSE on 2 1/2 ac, 3 b/rs & sleep-out, sheds, power, water, ph, close to river, school & bus to Grafton, great lifestyle & community. \$79,000 ONO. Ph: 02-6643-2055.

QUEENSLAND

PERFECT QUEENSLAND HIDEAWAY, 21 ac natural pine forest, all-timber weekender cabin with elec & ph connected. All overlooking extra lge perm dam & hidden in middle of the forest. \$42,000. Seller terms to anyone with \$5000 full deposit & \$120 pw. Ph: Wayne, 07-3262-6050.

ONE HUNDRED ACRES FOREST near Dalby Queensland, rugged natural crk fronting undulating open forest country, wildlife galore, 2 1/2 hrs Brisbane. \$32,000, or with new lge hayshed \$34,600. Wayne, 07-3262-6050, lan, 07-4662-2981.

NATURAL OPEN GRASSLANDS and forest 1250 ac, with long frontage to perm crk & many lge perm natural lagoons. Old shearing shed, power & ph avail. Located 3 hrs Brisbane/Gold Coast/Sunshine Coast in Queensland. Full price \$100 per ac (\$125,000). Wayne, 07-3262-6050.

NO ONE WILL EVER FIND YOU at Bentleigh Station, 650 ac, virgin open forest teeming with wildlife. Home built to lock-up in middle of property, 10 ac of lagoons & long frontage to perm Wilkie Crk. Located 3 hrs Brisbane/Gold Coast. \$125,000. Owner will consider home anywhere as full deposit & seller finance balance @ \$135 pw. Wayne 07-3262-6050

BLOOMFIELD RIVER – DAINTREE, 12.5 ha, coastal views, rd access, power, lovely bushland. \$85,000 ONO. Ph: 03: 6369-5465. email: artark@vision.net.au

WHITSUNDAY AREA 2106 sq m at Dittmer, ex-goldmine, elevated flat block, in valley, ready for building, bore, power, ph, r/forest, secluded area, 22 km west of Proserpine. \$22,000. Ph: 0429-001-319.

STANTHORPE, TRANQUIL bush, 40 ac, modern 2 b/r home, solar powered, crk. \$95,000. Ph: 07-4683-4254.

BRISBANE CITY RETREAT, 1 hr from our 5 ac horse paddock/homesite with panoramic valley views, power, ph, sealed road. \$32,000. Owner gone interstate, so make the payments (\$100 pw) & the freehold property will revert to you. Ph: Paul, 07-5497-6081.

CHANCE OF A LIFETIME, 5 ac on crk, power & ph, great views down the valley, 10 mins to local town and 1 1/2 hrs to Brisbane. Full price \$32,000 seller terms, \$500 full deposit & \$85 pw. Ph: lan, 07-4662-2981, or Wayne, 07-3262-6050.

ATHERTON TABLELANDS, 60 ac 1/4 r/forest, adj to popular waterfalls. Timber home + sep barracks, sheds, perm crks, ph, power, fenced, machinery, suit farmstay, hobby farmer. Six km Millaa Millaa. Hydroelectric potential. \$195,000 ONO. Ph: Clinton, 07-4097-2204.

KINGAROY, SE Qld, secluded, edge of town but like country, 4 b/r bv home, en suite, cathedral ceilings living area. Solar HW, also connected to wood heater, 6000 gal r/water storage, elec, sewer, 2 ph lines, town water all connected. Double LU brick garage. Large allotment, 2538 m², northerly aspect. Grow your own food, more than 50 estab f/trees organically fertilised: peaches, plums, mangos, avocados, citrus, grapes, pawpaws etc, organic vegie garden. Two hundred km NW of Brisbane. \$155,000. Ph: 07-4162-4986.

CENTRAL QUEENSLAND COAST, 40 ac, house, sheds, power, pumps, mowers, dams, orchard, fenced, close to beaches, nat pks, school. Reluctant sale. \$79,000. Ph: 07-4156-6556.

BUDERIM, 1/2 ac, 3 b/r split level home with en suite, bushland setting, close to shops, school. Power, water & septic. Ideal investment. \$150,000 ONO. Ph: 02-9545-4307.

BUNDBERG HINTERLAND HOBBY FARM, 2 – 3 b/r house, screened in verandah, power, ph, lge shed with tractor & implements, pump & irrigation. Very private selectively cleared 56 ac, 2 titles, 10 mins to town. House located on rolling hills amongst tall gums & ironbarks, estab gardens, f/trees & fertile soil, 3 dams & perm crk. Currently rented. \$97,000 ONO. Ph: 07-4974-7147 AH 5pm.

BEAUTIFUL, PRIVATE VALLEY of 64 ha, selectively cleared, mostly gentle slopes and flats, abundant dam water. Ideal climate & aspect, frost free around home site. Liveable shed plus 65% finished house of split-face blocks. Thirty varieties of f/trees (180 in all). Phone & power connected. Photos avail. \$149,000 ONO. Ph: 07-4157-2736.

SOLAR PRICE CRASH! See inside front cover. **HAMPTON, THIRTY MINUTES NORTH TOOWOOMBA**, renovated Queenslander on 6 1/2 ac, 3 b/rs, dining room, 2 verandahs, lovely views, no near neighbours; suitable goats, grapes, olives. \$135,000. Ph: 07-4696-5237.

BUNDBERG AREA, lge family home, 2 sheds on 20 ac. Native vegetation, springs, good bore. Handy to school buses & kindergarten, 20 mins to beach. Ph: 07-4157-7227.

CHILDERS, MODERN BRICK HOUSE, double c/port, awnings, town water, dam, fenced acreage, near coast. \$97,900. Details: 07-4126-8260.

GRASSIFIEDS

PROPERTY FOR SALE QUEENSLAND

DYNAMIC, PROSPEROUS, LOVING PEOPLE are now purchasing 2008 m² to 5313 m² f/hold building lots at Kookaburra Park Eco-Village. Building fabulous dome homes, log cabins & dream houses. Living in harmony with nature & working from the safe, clean, private, timbered parkland on our 194 ha estate. Stage 4 is now selling. For an appointment to visit ph Barry or Chris. Ph: 07-4157-2850. Fax: 07-4153-1358. Email: Kookaburra@sunweb.net

Web: www.sunweb.net/kooka/
PICTURESQUE, ORGANIC 1.163 ha, 12 mins from Gympie, 2 b/r red cedar cottage, timber interior, lots of light. All modern conveniences, 2 lge verandahs, dble c/port, dam, sheds, views, beautiful native & tropical gardens, young r/forest, orchard, vegies – a gardener's paradise. \$112,000. Ph: 07-5483-5149.

HOME IN BUSH PARADISE on 11 ac, 14 km from Kingaroy. Charming 2-storey w/b 4 b/r home, sewing room, office, 2 tiled bathrooms, extensive built-in closets/storage; wall-to-wall carpeting, air conditioner, 9.1 m x 3.3 m garage/workshop, shadehouse. Separate 'roundhouse' with tiled bathroom; can be easily modified to self-sufficiency unit. Large shade trees, mature mango, avocado, persimmon trees, 15,000 gal tanks, 2 sml tool sheds. Grey water reticulation system. A wildlife sanctuary with a variety of birds to feed & befriend. \$115,000. Ph: 07-4162-1002.

MIRIAM VALE, GATEWAY TO AGNES WATERS, 15 ac, fully fenced, 6 km town, comfy steel frame, Colorbond cottage, dam, power, ph, school bus, estab gardens. \$95,000 ONO. Ph: 07-4974-5485.

YUNGABURRA, ATHERTON TABLELANDS. 6 yr old 3 b/r steel frame home on 1000 sq m block with a 6 x 9 m shed. Grow your vegies. Birdlife, fishing, watersports. \$185,000. Can send photos to genuine enquiries. Ph: 07-4095-3236 (h/n).

TARA, DARLING DOWNS, 33 ac black soil, been cropped, lge dam, tree lined crk, fully fenced, woolshed, 1 b/r cottage, irrigated garden, power, ph. Reduced to sell at \$65,000. Ph: 07-4669-2141.

MOBILE HOME, 36 ft bus, a goer, on 30 ac, gum trees, 2 dams, power, ph at gate. Must sell. \$28,000 ONO. Ph: 07-4669-2141.

QUAINT LARGE 2 – 3 b/r w/b house on 2½ ac plus s/c cottage. Fully fenced. 5000 gal r/w/tank. Spring water source. Power, water, ph. State subtrop forest opposite, 50 km west of Ingham in mountains. Primary school. Lovely sml bush community. Sell \$90,000 ONO, or swap anywhere. Ph: 07-4777-5129.

BUNYA MOUNTAINS, cosy 3 b/r home on ½ ac. Wood-fired heater. Abundant wildlife. \$125,000 ONO. Ph: 07-4157-7227.

PLACING AN AD?
See page 73 for details

ROSEDALE, MAJESTIC QUEENSLANDER, 100 ac, lge shed, cattle yards, 6 paddocks, 3 dams, bore, situated on unspoiled Baffle Crk, 65 km nth of Bundaberg. \$200,000. Ph: 07-4154-4773.

BESIDE STATE FOREST, 1½ ac old forest, tall trees, upland. Saleable timber & good house site. Good drainage & suitable for dam. Rural zoning, Telstra service, near school bus route. 200 km nth of Brisbane, ½ hr Gympie, ¾ hr Tin Can Bay, 1½ hr Fraser Island. \$19,500 ONO. Ph: owner, 07-5485-7350.

A WORLD OF YOUR OWN, 40 lightly treed ac, borders state forest. Native bush, abundant wildlife, towering gums, scenic views of Great Divide, fertile soil, dam, power. Peace & quiet of Lockyer Valley, 10 mins to schools/shops, 30 mins Toowoomba, 1 hr Bris. Urgent sale. Only \$79,000. Ph: 07-5462-7182.

NEAR DALBY, Queensland, 100 ac with cypress forest, lge house with all mod cons. Owner's finance. For details ring: Tom Lazar, 07-4668-2122.

WALLAUMARRA RAINFOREST SANCTUARY, self-contained 2 b/r cabin in 40 ac near-virgin r/forest, adj Eungella Nat Pk west of Mackay, nth Qld. Established, managed tourism accom. Abundant birdlife & fauna, spring-fed crk & walking trails. Suitable private use. \$135,000. Offers considered. Ph: 0407-606-491 for photos, etc.

RAINFOREST RETREAT & sml camping area, enviro friendly, requires active partner, must be into garden & Euro travellers, a 2nd language would be an advantage. Ph: 07-4958-3204.

GAYNDAH AREA, modern 2 b/r Weatherex house, sml shed, elec, 40 young f/trees, fenced, seasonal crk, pastoral views, sml community, low rates. \$47,500. Ph: 07-4696-6108.

HORSE LOVERS – STABLES/RESIDENCE, 8 registered 10' x 10' racehorse stables – day yards, tack rooms, exercise yards plus more, 3 b/r highset house – fenced pool/BBQ area – 2½ ac. Rockhampton. \$143,000. Ph: owner, 07-4156-6393.

THE HINTERLAND COMES TO NOOSA: Very private 4 b/r, 2 bathroom home with open plan living areas. Sunny balconies overlook adjoining lge pk to the side & the rear. Lots of trees & a vegie garden complete this unique lge timber home, 800 m² in the centre of town with the feel of the hinterland. \$360,000. Ph/fax: 07-5449-2315.

BEAUTIFULLY TIMBERED COUNTRY, 9.9 ha, 2 b/r cottage, shed, workshop. Located 10 km on Bruce Hwy, nth of Childers. Price \$65,000 ONO. Ph: 07-4788-1215.

VICTORIA

EAST GIPPSLAND: r/forest wilderness – trout, crays. New 3 b/r WRC home set on approx 2 ac, 4 titles, lge vegie garden, 5000 gal tank, perm crk, also old house ideal to renovate, 2 mins walk to shop & PO Box & school bus. \$110,000. Ph: 03-5158-3265 after 8.30pm.

TWO COTTAGES ON SIX BLOCKS in quiet Mallee town, all utilities, very peaceful. \$30 k ONO. Owner going to sea. Ph: 0418-596-965, 03-5081-6363.

ACHERON (Alexandra district), 320 ac, 120 km from Melbourne. Land for Wildlife block. Half natural bush, remainder pasture. Secluded location with abundant wildlife, magnif views, lge dam with clear water. 'Early Settlers' WRC cottage, wood heating, estab garden & orchard, good shedding. Generator/solar power. Watch the sun set on the Cathedral Range from the verandah. \$1000 per acre. Ph: 03-5772-0211 BH, 03-5772-1966 AH.

ALEXANDRA AREA, country charm, cosy 4 b/r home on 60 ac, 2 titles, huge potential. Vic Properties, 03-9852-3322.

TOP TEN ACRES, gold country, lovely bush block with gum & ironbark trees, excel access. Call now. Vic Properties, 03-9852-3322.

TERRIFIC TWENTY ACRES AT TALBOT, backs forest, ideal for weekend getaway. Vic Properties, 03-9852-3322.

GREAT POTENTIAL – PYALONG PARK, 40 ac, undulating, spring-fed dam, 3 titles. Call for more details. Vic Properties, 03-9852-3322.

THIS MONTH'S HOT SPECIALS, Western Victoria, 50 ac of bush scrub, great for trail bikes. \$590 per ac.

Northern Victoria, 50 ac 3 hrs Melb. \$750 per ac. Make an offer! Vic Properties, 03-9852-3322.

VENDOR TERMS, an easy way to buy land. Example \$20,000 – 10% deposit, then repay \$75 per week. It's that easy! Call now for details. Vic Properties, 03-9852-3322.

EAST GIPPSLAND, 20 mins Lakes Entrance, renovated 3 b/r house, 16½ sq, all-new gas kitchen, sunroom, femery/aviary, dble garage, many sheds, vegie garden, f/trees, 2 ac backing state forest, wildlife, birdlife, power, town water. Native gardens. \$85,000 ONO. Ph: 03-5157-5349.

EDENHOPE, ideal for horses, 2 storey 6 yr old 'Cape Cod' Hardiplank home on 57 ac, in immaculate condition with upstairs main b/r and balcony, serviced by bathroom, spa and dressing room. Downstairs spacious living area, modern kitchen, pantry and lge b/r, with en suite & dressing room, strong room 10 ft x 9 ft, plus large attached study, 15,000 gal water storage, + lge dam. The property is 1 mile from Edenhope, Vic, with excel town, hospital facilities. Price: \$135,000. For enquiries contact Kevin, 03-5585-1355, 03-5585-1080 AH.

LISMORE, VIC, ¾ ac. Cash or terms. Ring owner, Brian, 03-5785-1414.

MARYBOROUGH, 3 b/r w/b house, 8 ac, solar power, town water, crk frontage, sheds. Ph: 03-5461-4256, 0408-504-845.

ST ARNAUD 20 ACRES, dam, fenced, all services avail, 5 km from town. \$17,995 ONO. Ph: 03-5794-1837.

CASTELLA, YARRA VALLEY, mudbrick, timber home, 5 b/bs, lge country style kitchen & living area. Set on 5 ac, surrounded on 3 sides by nat pk, crk on boundary. Perfect bed & breakfast potential, lots of charm, Land for Wildlife registered. \$285,000. Ph: 03-5962-9041.

Don't forget to include your area code with your phone number. It's best to set it out as 00-0000-0000.

GRASSIFIEDS

PROPERTY FOR SALE

VICTORIA

TEN ACRES FOREST, dams, abundant wildlife, 7 yr old, 2 b/r western red cedar home. Solar power, 6 mins from Rushworth. \$87,000. Ph: 03-5856-1980.

TASMANIA

ONE HECTARE GLASSHOUSE property 20 km from Hobart, currently hydroponic production. Original soil river flat. Current owner believes organic farming philosophy for a sustainable world food production system is utter crap but is prepared to be proven wrong. Price \$300,000. contact Hank, 03-6263-7270, or write to: PO Box 59, BRIDGEWATER 7030.

LAND WITH ANY TYPE OF DWELLING, \$20,000, northern Tablelands NSW, or Tasmania. Remote area okay. Ph: 02-6732-6893, PO Box 611, GLEN INNES 2370.

ABOVE GOLDEN VALLEY, internal bush property - 50 ac with views of Quamby Bluff, permanent water stream, house site cleared, north east aspect. \$45,000. 'Land Inquiries', Box 321, DELORAINE, Tas 7304.

LOONGUNA (Leven Canyon area), gravel rd frontage, 50 ac bush property with views of mtn range, river running through centre of property, 2 house sites cleared, nth to NE aspect. \$48,000. 'Land Inquiries', Box 321, DELORAINE, Tas 7304.

BEAUTIFUL WILMOT VALLEY, 3 b/r house, comb/stove, power, w/heater, glassed in balcony, separate well built art studio, dble c/port, outbuildings, all facing nth on 18 sloping ac, 10 grass, 8 valuable bush, 35 mins Devonport. \$72,000. Ph: 03-6492-1369.

COUNTRY LIVING, OWN BUSINESS, 3 b/r cottage nestled in the picturesque Fingal Valley (Tasmania), mtn views, 1 hr ski slopes, 20 mins beaches, 47 ac, dam, bluestone quarry. Licenced smallgoods, presently making Bratwurst, will train, food van, marquee with weekly markets, seasonal shows, plenty of scope to expand. \$140,000 ONO. Ph: 03-6374-2315.

KING ISLAND, famous for cheese, crayfish & beef. All amenities, pollution-free lifestyle, 245 ac, 2 titles, house & 50 ac, with lge dam, troughs, sheds, haybarn, stockyard. \$155,000. Also, 195 ac, dams & troughs, all sandy loam soil, running approx 200 head. Well sought after for lease, \$185,000. GST free. Ph/fax: 03-6463-1161, email: isabeahl@hotmail.com

SOUTH AUSTRALIA

THREE RURAL ACRES, BALAKLAVA, with lovely home, sheds, water & elec, 50 mins Adelaide. School bus passes. \$85,000 Ph: 08-8862-1027

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if wishing to advertise in
Grass Roots*

DEADLINES: GR141 - AUGUST 30TH
GR142 - OCTOBER 30TH

YONGALA, TEN MINUTES PETERBOROUGH, lge stone house, structurally sound, pressed tin ceilings, new kitchen, & lge stone ex-Masonic hall, outbuildings/sheds, approx 3 ac, with numerous olive trees. \$50,000. Ph: 08-8651-4262.

ADELAIDE (32 km from), home on 3.7 ac, vegan gardens, f/trees, space galore, suit 2 families. Info send 2 x 45c stamps. \$285,000 ONO. Ph: 08-8389-2372.

COMMUNITY/SHARES

HOUSE AND LAND for sale \$38,000. A 1/10 share in 156 ac in Daintree, near Mossman, FN Qld, f/trees, half-built house, river access, borders World Heritage rainforest. Ph: 07-4053-4828/0412-152-611.

SHARES IN SMALL INTENTIONAL COMMUNITY near Nimbin. Organic A certified property, shared gardens, orchards, livestock etc, child friendly, council approved. \$35,000. Ph: Mark, 02-6689-1019, or Sabina, 02-6689-0211.

FAR NORTH COAST, house & 1/8 share 300 ac, spring water, solar, cabin, views, cathedral ceilings, stained glass, estab garden, 35 mins nth Lismore. \$96,000. Ph: 02-6689-1074.

MID NORTH COAST NSW, 1/8 share in 380 ac, backs state forest, perm crk. \$20,000 ONO. Ph: 0419-611-460. Leave number. Best offer.

GIN GIN, QUEENSLAND AREA, share with optional accom 15 ha property, mostly cleared, excel scrub soil, frost free, 2 lge dams, estab f/trees. From \$15,000 share only to \$45,000 share with 2 b/r house. Ph: 07-4152-8450.

PROPERTY WANTED

HOUSE ON APPROXIMATELY TEN ACRES, Merimbula to Batemans Bay area. Close to school (bus), town. Ph: 02-6457-8175 evenings.

LAND WANTED, ULLADULLA to Eden, not more than 1 1/2 hrs inland from the coast. Must be more than 3 km from school bus. Ph: Nicky or Neil on 02-4829-2333 until Sept 8, & 02-6288-0735 after this.

WANTED TO BUY 10 to 30 ac bushland, reasonably good soil, must be frost free. No dwellings. Phone evenings: 07-4778-2991, or 07-4787-3562.

FOR RENT/CARETAKER WANTED

PENSIONER COUPLE would like active pensioner to join them on hobby farm in SE Qld. Must be keen gardener, n/s. Ph: 07-5546-8676.

CARETAKER COUPLE REQUIRED for 5 b/room rural home NW NSW. References required. Ph: 02-6794-4731.

CHINCHILLA QUEENSLAND 38 km, 2 b/r cabin on 250 ac, fenced. \$80 pw. Ph: 07-4669-4295.

PERSON(S) TO SHARE/RENT house, c/van, secluded Hunter bush block, 60 km Newcastle. Infinitely negotiable. Ph: 02-4938-2036.

CARAVAN SITE or small caravan & annexe in exchange for a few hours handyperson/s help a week, power avail, secluded bush block with views, 60 km sth Gladstone, Qld. Ph: 07-4974-2132.

SINGLE MALE, 30, with 2 children, looking for single female or mum, to move in & share the bills. Very cheap room to let in big house on 3 ac in exchange for gardening & developing the land with GR knowledge. Ten km from Ballarat, Vic. Must be big hearted & easy-going & also love life & kids. Mark Scheele, 1210 Midlands Hwy, SULKY 3352.

FREE SITE for single man with own caravan in exchange for 5 hrs work/week. Possibility to start organic vegie garden & herbs on share profit arrangement. Suit pensioner. Location north Rockhampton. Please ph: 0427-200-402 on weekends.

BUSINESS FOR SALE

BACKPACKERS/HOMESTAY, family holiday/fishing lodge, island paradise, 1 hr Brisbane CBD. Fishing tours, owner's residence, workshop, garage, orchard, gardens, website, solid investment. Expanding business. Ph: 07-3409-1960. Affordable.

WANTED TO RENT/CARE-TAKE

FREE RENT AND ACCOMMODATION for person or couple interested in living on isolated 100 ac property in the Bendemeer district, NSW. Must in return tend vegie garden & look after hobby farm animals. NB: Property has no power. Contact John, 0418-230-750.

COUNTRY COUPLE WITH EXCELLENT REFERENCES, seeking long-term rental/caretaking position in Southern Highlands area. Ph: 0413-229-393 evenings.

CAR STORAGE, four months, southern states, couple to NZ. 39 Cardo Court, DARWIN, NT 0820.

RESPONSIBLE VEGETARIAN LADY seeks self-contained dwelling/share home, Gold Coast hinterland property. Employed. Enjoys simple lifestyle, animals. Ph: Judy, 07-5596-1478.

OPPORTUNITIES

ORGANIC ANIMAL FEED, grain & fertiliser distributorships avail of 'Kurrajong Organic' products. Only \$650 capital outlay gets you started. Ph: Morgan Kurrajong in Canberra on 02-6230-4846. Email: kurra@dynamite.com.au

SOLAR PRICE CRASH! See inside front cover.

ANSWERING A CONTACT AD?

Please put each letter in a separate stamped envelope addressed C/- GR. We will re-address & forward it. Don't forget to put the issue number on reply, i.e: Skye (GR 128) . .

GRASSIFIEDS

OPPORTUNITIES

FAMILY WITH THREE YEAR OLD offers opportunity for extended family lifestyle to active lady with caring nature. Reply JG (GR140), C/- Box 117, SEYMOUR 3661.

LIFE CHANGING PRODUCT: Help others while helping yourself & get paid handsomely to do it. This is a direct sales business with an 80% gross profit. Call: 1300-552-526.

SOLAR PRICE CRASH! See inside front cover. **WOULD YOU LIKE A CHANGE** in lifestyle by spending time in warm & beautiful Binalong Bay NE Tas, near town of St Helens? Lady with slight balance problem needs female person to assist with beach walks & canoeing, approx 2 hrs daily - 5 days pw, in return for free cabin accom. Further info ph Jay, 03-6376-8108, &/or write to Ms J Yulumara, C/- Binalong Bay Store, Tas 7216.

PUBLICATIONS

SOLAR PRICE CRASH! See inside front cover. **STEINER HOME SCHOOLING?** A teaching manual by Alan Whitehead on Creativity and Curriculum. Send \$12 to: Golden Beetle Books, Box 33, BRUNSWICK HEADS 2483. Ph: 02-6680-3889, fax: 02-6680-4314. Visa-Mastercard.

www.users.bigpond.com/goldenbeetlebooks/ **'NATIVE STINGLESS BEES'** for profit or pleasure - how to get started, pollination/honey potential in Queensland. Detailed info booklets, packed with photographs, diagrams. For free catalogue, send name, address & 45 c stamp to: ANBRC, Box 74-G4, NORTH RICHMOND 2754.

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'NEW VEGETARIAN & NATURAL HEALTH', the magazine of the Natural Health & Vegetarian Societies. Subscribe today, \$30 yearly and receive: 4 vital magazines, discounts at participating health food stores and natural therapies practitioners, listed in magazine. Head Office, 28/541 High St, PENRITH, NSW 2750. Ph: 02-4721-5068.

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PLACING AN AD?

See page 73 for details

BOOKS, NEW AND OLD. Australiana, lifestyle, Pacific, biography, horticulture, gardening, outdoors. Lists avail. BA & JM Wallace, Box 325, PORTLAND 3305.

HOME EDUCATION for info send SSAE to: Alternative Education Resource Group, PO Box 71, CHIRNSIDE PARK 3116. **SAVE 35% ON 'INTRODUCTION TO PERMACULTURE'**, by Bill Mollison. Increased production costs boosts year 2000 retail prices to \$39.55 (incl GST), all books with scuffed covers in the warehouse must be sacrificed. \$25 (incl GST). Publisher pays postage within OZ. Discounts avail on bulk purchases while supplies last. Call Tagari Publications: 03-6445-0945. Fax: 03-6445-0944.

Email: tagaribooks@hotmail.com

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BEE POLLEN, no additives, 450 g sample pack \$10, 1.9 kg pack \$35, 4.3 kg pack \$70, 14 kg drum \$185. Prices include p&p. A & M Sciberras, PO Box 15, RAMCO 5322.

HOME STONE FLOUR MILLS - mill your own stoneground wholemeal flour for cakes and bread at home with a Retsel Little Ark stone flour mill. Endorsed by Housewives Association. Write for catalogue to: Retsel Distributors, PO Box 712, DANDENONG 3175, encl 3 postage stamps. Ph: 03-9795-2725. Distributor enquiries welcome.

STONE GROUND FLOUR at home, with SCHNITZER German quality hand or electric stone mills. Freshly milled whole grain flour is essential for optimum health. Ten models from \$179. Send SAE for brochures, or add \$5 for video. SCHNITZER (Aust), PO Box 1867, BOWRAL, NSW 2576. Ph/fax: 02-4861-1581.

MANGO AND YOGHURT ROLL-UPS, \$2 ea, minimum order \$20 includes p&p in Australia. Payment with order. R McDonald, 43 Country Rd, NOME, Qld 4816. Enquiries, ph: 07-4778-8332. Email: oldmcs@ultra.net.au

MISCELLANEOUS

TRIDENT TIPIS. Professional workmanship, quality materials, traditional designs. For brochure, samples and prices write to: 'Earth Mother Craft', 'Rosehill', Hayes Road, via MILL-FIELD 2325. Ph: 02-4998-1147.

HOW TO MAKE MONEY selling & making chess pieces, bird baths, fine art, gnomes etc. Plaster and/or cement moulds. For methods & catalogue send \$14.95 to: Williams Imports, PO Box 989, SOUTHPORT 4215 (06/50 Railway St). Ph/fax: 07-5532-9050.

ALL NATURAL BEESWAX - based products: moisturising creams, lip balms, heavy duty creams, soaps, furniture & car polishes. Brochure-SAE to: Moore, Bee-J Products, 70 George St, WOODFORD, Qld 4514.

SOLAR PRICE CRASH! See inside front cover.

SEPTIC TANKS - HOW TO BUILD or how to maintain one. Don't desludge! Treat the cause. Booklet \$20. HG Stephens, PO Box 18, EAST MELBOURNE 3002. Ph: 03-9510-3192.

WANTED, KEEN BIBLE STUDENTS or persons interested in bible prophecy. Contact Eleventh Hour Ministry, PO Box 212, SHEFFIELD, Tas 7306. Ph: 03-6491-2408. Email: grayd@bom.com.au

HEALTH & BEAUTY

ALCHEMY CONCEPTS, CANDLES, SOAPS & body products. Handmade using age old methods. Retail & wholesale. Ph/fax: 02-4934-8301. PO Box 70, MEDOWIE 2318.

HANDMADE PURE VEGETABLE OIL SOAPS. These natural soaps are suitable for people who have sensitive or problem skin. For a product brochure send SAE to: Bushcraft Soaps, Lot 3 Counter Rd, M/S 591, GYMPIE 4570. Ph: 07-5486-7299.

OLIVE LEAF EXTRACT, nature's antibiotic, for colds, flues, viruses & more, \$15/200 ml. P&H incl, J Schloss, MS 571, MURGON 4605.

MENSTRUATION - AVOID PAYING GST!

Sustainable, reusable menstrual options are available! **MOON PADS** are washable cloth pads. **THE KEEPER** is a natural rubber cup which replaces tampons. For brochure send SAE to: Moon Pads, PO Box 118, SANDY BAY, Tas 7006.

BEE-RELIEVED™ a natural alternative for the treatment of degenerative joint disorders that really works! (Testimonials available.) New Zealand's only bio-gro certified beekeepers offer you Bee-Relieved™, which contains glucosamine (a natural compound produced by the body for the maintenance of joint cartilage and connective tissue), and bee venom, (which contains melittin, a powerful anti-inflammatory agent). Bee-Relieved™ is now available from OutMarket. Bee-Relieved™ 100 x 500 mg capsules \$34.95*. Contact: Bee-Relieved™ at OutMarket, Suite 221, 353 King St, NEW-TOWN, NSW 2042. Fax: 02-9550-5553, or email: beerelieved@mail.com *cheque or money orders only, includes GST, p&h.

ORGANICALLY GROWN TRADITIONAL HERBAL remedies for everyday conditions, arthritis, psoriasis etc. For catalogue please send stamped self-addressed envelope to: Tintagel Herbs, PO Box 27, CENTRAL TILBA, NSW 2546.

NONI CAPSULES (*Morinda citrifolia*), Noni fruit's unique & powerful nutritional properties have attracted a considerable amount of attention. Used in China, India & the Pacific as a food & tonic. This pure high quality fruit powder is a 10:1 concentrate in a vegetable gelatine capsule. Ph: 08-8522-1563, 08-8261-7417, 08-8266-4243, 08-8285-3561, 08-8725-3673, 08-8263-0382, 08-8633-2044, 08-8263-1303.

EAR CANDLES the gentle ear wash out alternative. Helping with glue ear, ear infections, swimmers ear, some tinnitus and wax build up. \$10 pair incl p&h. Trade & bulk price enq welcome. Orders taken by: 'Ageless Alternatives', PO Box 159, BOONAH, Qld 4310. Ph/fax: 07-5463-2475.

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TOXIC-FREE SUPPLIES, no sulphates, petrochemicals, synthetic preservatives or other nasties. Just honest to goodness skin, hair, body care & household products. Raw ingredients for DIY, essential oils, cold-pressed oils, clays, beeswax & lots more. Visit our 'Hand-made Naturals' store at 7 Gladstone Rd, HIGHGATE HILL, Brisbane, or contact Corinne for your free brochure & ph orders on 07-3846-4685. Email: handmade60@hotmail.com

BUCKWHEAT PILLOWS FOR MEDITATION, yoga & sleeping. Australian grown buckwheat husks, no herbicides or pesticides. 100% Australian cotton cover. \$45 incl postage. Husks avail in bulk. Just Natural Ventures, 03-9481-1872. justnatural@bigfoot.com

FOR SALE

STEINER PRIMARY SCHOOL EDUCATION books, set of 10, as-new, cost \$120 sell \$80. Ph: Robyne, 07-4159-4502.

WOOL WINDER to use in conjunction with knitting machine. Contact: M Williams, RMB 1404, COBDEN 3266.

RAINWATER TANKS, stock troughs, feeders etc, wide range of sizes. Made from UV stabilised food-grade poly. We can match or beat most quotes. Ph: 02-6230-4846.

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SOLAR BATTERIES: 8 suncycle 3AS190 6 volt batteries 190AH each, 2 years old, excel condition. Selling because of system upgrade. Cost \$2300, selling for \$1450 ONO. Ph: Sydney, 02-9929-1814 evenings.

PUMP, water elec, Onga, fully reconditioned \$350. Ph: Kevin Forster, 03-5585-1355, 03-5585-1080 AH.

BIO PHASIC 27 VOLT ZAPPER, \$167. Guaranteed to perform to Dr Bob Beck specifications. Variable multi-frequency 36V bioelectrifier, \$197. Hulda Clark 9V zapper with stainless steel handles & battery indicator light, \$127. Colloidal silver generators, 9V with switch & indicator conductivity light, \$75, 27V \$87. Pyramid grids 20 x 1" pyramids, quartz filled, for charging water, oils, food, \$37. Enquiries to B Wilkinson, ph/fax: 07-4638-9035.

SOLAR PRICE CRASH! See inside front cover.

MOBILE HOME TRAILER, 32' x 8', aluminium annexe, 28' x 8'. Used as on-site home, some internal fittings & loo \$4500 ONO. GARFIELD area, 03-5629-2705.

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RAISE YOUR OWN HOUSE COW. Calf feeding made easy with a 'Calfateria'. No more training to drink from a bucket. Happier calves make friendlier cows. Models for 1 calf \$33, 5 calves \$100. Ph: 02-6230-4846.

COURSES

SOLAR PRICE CRASH! See inside front cover.

PERMACULTURE – sustainable living & self-reliance. Courses & workshops with Robyn Francis & others, garden tours & resource centre, **FREE** copy of 2000 YEARBOOK. Contact: Djanbung Gardens Permaculture Centre, NIMBIN, ph/fax: 02-6689-1755.

BUSHFOODS COURSE with Peter Hardwick, Oct 9 – 14. Growing, harvest & use of food, spice & craft plants. Djanbung Permaculture Centre, ph: 02-6689-1755.

CORRESPONDENCE STUDIES. Diploma and certificate programmes, professionally recognised. Learn for personal interest or business practice. Select one brochure from: Aromatherapy, Vitamin & Nutrition Therapy, Traditional Folk Medicine, Animal Medicine (The 'Green' Vet), Psychic Healing, Preschool Childcare, Safety & Security Counselling, Personal Psychic Development, Traditional Wicca. New course: 'Herbs For All Ways And Always'. Wiccan Home Studies, PO Box 138, SURRY HILLS 2010. Ph: 02-9319-6166 BH only.

PERMACULTURE CERTIFICATE (Correspondence) \$360 in instalments. Calyx Horticultural Services, PO Box 220, COOPERS PLAINS 4108.

SEMINAR ON FARMING WITH CLYDESDALE horses, Sunday, August 20, 80 km north-west Melbourne. More info, 03-5427-1057.

WESTERN AUSTRALIA PERMACULTURE DESIGN course: Residential certificate course at the Sustainable Agriculture Research Institute in the SW of WA. Oct 16 – 27. Students can enrol in whole course or complete in two 5 day modules. A practical course emphasising property design. Tutors are Jeff Nugent & Julia boniface, authors of *Permaculture Plants, A Selection*. Enquiries to Julia: PO Box 10, NANNUP, WA 6275. Ph: 08-9756-1014. Future course: Dec 4 – 15.

PERMACULTURE DESIGN COURSES with Rick and Naomi Coleman, PEDS. Next course September 15 to 30, 2000. See ad in body of magazine. Call Naomi 03-5664-3301 for info.

GARDEN & ORCHARD

BOB MAGNUS'S FRUIT TREES, for my 2000 list of apples, pears, plums on dwarfing rootstocks, plus quinces & hazelnuts please send 3 x 45 c stamps to: Bob Magnus, WOODBRIDGE, TAS 7162.

LOOKING FOR HERITAGE or traditional fruits & vegetables? Join the Heritage Seed Curators Association. Our regular 'Seed Listing' winter issue of *The Curator* lists the sources for thousands of veggie, herb & fruit varieties. Our summer issue has major articles, tips and notes about saving heirloom varieties. Membership costs \$25 PA or \$18 for low income earners. Contact HSCA, PO Box 1450, BAIRNSDALE, Vic 3875.

COMPANION PLANTING CHART: over 90 vegetables, herbs and fruits, including plants as insect repellents. Sow when Chart: Suggested sowing times for 100 vegetables, herbs and flowers. Mail order \$7 each + \$3 p&p. Plum Products (G), PO Box 120, Wards Rd, TAMBO UPPER, 3885.

BAMBOO PLANTS, lge range, best prices. Ph: 07-4129-4470, fax: 07-4129-0130.

BAMBOO: PLANTS – BOOKS – FLOORING, 250 species, running or clumping, 15 titles bamboo books. Bamboo flooring boards now in stock. Send \$4.50 in stamps for catalogue. Bamboo Australia, BELLI PARK, Qld 4562. Email: bamboo@bamboo.02.com.au

RAINFOREST SEED COLLECTORS national link-up. Buy and sell local seed. Our newsletter has lots to offer. Local seed grows better and doesn't pollute your gene pool. Quarterly newsletter subs \$20, concession \$10. Offer local seed – free subs. RSC, Private Mail Bag, BELLINGEN 2454. Ph: 02-6655-2233.

TREE GUARDS all shapes/sizes from under 10 cents each. Bamboo stakes and goat hair mulch mats. International Reforestation Supplies, 510 Bellbird Rd, BAIRNSDALE 3875. Ph/fax: 03-5157-9404.

BAMBOO, CLUMPING, NONINVASIVE. Exotic, edible, structural, screening etc . . . Send 2 x 45c stamps. 41 Jarvey Dr, MS2293 AGNES WATER, Qld 4677.

ROB'S RARE PALMS, the leader in palms in SE Q for 26 years, the original palm nursery, over 200 varieties in stock. Why go elsewhere? Ph/fax now: 07-3888-2016.

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GIANT VEGETABLE SEEDS, send SAE to Atlantic Seeds, PO Box 8210, CARRUM DOWNS, Vic 3201 for full price list of the many varieties avail. Ph/fax: 03-9786-0337.

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GARDEN AND ORCHARD

WATER CHESTNUTS, easy to grow, \$1.50 per corm + padded bag & \$3 postage, with full growing instructions. Ph: 08-9926-1285, or send to: PO Box 547, DONGARA 6525.

MIXED HARDSHELL GOURD SEED (8 varieties) or LOOFAHS, quality organic seed, current harvest, guaranteed viability, 25 seeds, \$5 a pkt; full growing and drying instructions included, send stamped business sized SAE for return mail despatch. W K Mulhall, 5 Oxford Downs Rd, MACCLESFIELD 3782. Ph: 03-5968-5193, or visit our stall no 27 Akoonah Park Sunday Market, Princes Highway, BERWICK Vic, any Sunday.

HOLIDAYS

COFFS HARBOUR/KIA-ORA ORGANIC certified farm, cosy self-contained cottages on 100 ac, sleeping up to 8 people. Enjoy river frontage, pool, canoeing & fishing. From \$300/week. Ph/fax: 02-6654-3561 Website: www.midcoast.com.au/~kia-ora

WHITSUNDAYS, timbered, secluded, acreage homestay, nonsmoking, naturist, heated pool, air-cond b/rs, budget rates. Ph: Mike, 07-4945-1714.

MORUYA - FAR SOUTH COAST NSW, romantic 1 b/r and family 2 b/r bush cabins. Big open fires. \$250 per week. \$100 per weekend. Ph: 02-4474-2542, pm. Dogs welcome by arrangement.

LAMINGTON GLEN, r/forest retreat, secluded cabin - everything supplied except food. Ph: 07-5544-8166.

ORGANIC HOLIDAY FARM - 'Heron on Earth' - 20 km east of Devonport, near beaches & nat pks. Private fully equipped modern solar house, sleeps 7. Rates incl everything + organic produce in season. Canoes & bikes avail. Ph: 03-6428-6144. <http://www.southcom.com.au/~heron>

WYNDHAM AREA, very private secluded area, acreage homestead, budget rates, mountain area, adjoins nat pk, abundant wildlife. Accommodates up to 6 persons. Bega 40 km, 30 km from Merimbula, beaches. Ph: Phyllis, 02-6494-2175, or leave message on answer phone.

CLUBS

AFFILIATED DONKEY SOCIETIES OF AUSTRALIA. For information on membership, magazines and help avail write to Mr Ralph Grinly, 18 Inverness Rd, STH PENRITH, NSW 2750. You will be contacted by the representative in your state.

SERVICES OFFERED

BRIDGE OVER TROUBLED WATER. All ages, married or single. A problem shared etc. Bottled up emotions & problems are bad news. Write and air your views, maybe I can help. Advice, opinion, or just an ear. If you would like a reply please forward \$5 with your letter. Write: Dianne, High St, MACARTHUR, Vic 3286.

PLACING AN AD?

See page 73 for details

HOME PLANS. 'The Earth Builders Plan Catalogue' (180 pages): 92 plans for hand-crafted buildings (83 homes and 9 workshops, cabins, and carports) of mud brick, rammed earth, stone, poleframe, timber, poured earth, strawbale, construction details; usable sample working of a home (12 x A3 sheets). Mail \$68 (p&p incl) to: John Barton - Building Design, 31 Sharp St, NEWTOWN, Vic 3220. Phone and enquiries to: 03-5222-5774 for fixed quote to draw and document your home plan. Bankcard, Visa, Mastercard, cheques accepted. Free brochure available.

HANDCRAFTS

BEADS! BEADS! BEADS! Unique selections of handmade glass, metal and wooden beads. Also findings, threads and kits available. Cost \$8 for samples, colour copy and info. Write to: Tsunami, PO Box 129, WALPOLE 6398.

BUNDLES OF STRANDED COTTON available. Stranded cotton in bundles of 100* 8m skeins in 50 assorted colours. \$20 post free. Colours matched to dmc numbers. The Big Bundle of Stranded Cotton of 240 colours - \$50 post free. Send 45 cent stamp for free price list. Bankcard, Mastercard, Visa, money order, cheques. Arty & Crafty, PO Box 40, DAW PARK, SA 5041. Ph: 08-8277-3763. Fax: 08-8277-9402.

NATURAL GEMSTONE JEWELLERY, pendants from \$7.50, necklaces from \$22. Send 3 x 45 c stamps for descriptions and prices to: C Hunter, 54 Maidstone St, RINGWOOD 3134.

CRAFT WORKSHOP VIDEOS: Learn at home at your own pace from your personal, highly qualified instructor. VHS titles include spinning, weaving, beadwork, basketry, applique, tatting, knitting, crochet, lacemaking, felting, fabric painting and more. For full catalogue send long SAE to: Quick Spin Wool, Dept GR, RMB 1215, Shelford Rd, MEREDITH 3333. Ph/fax: 03-5286-8224.

BOOKS: Getting Started in Bavarian Folk Art, by Therese Vahland. A full colour beginner's guide to painting. Vol 1 \$13, Vol 2 \$16, incl p&h. PO Box 490, TORQUAY 3228.

ALPACA FLEECE: raw fleeces, assorted colours \$25 per kg, white silver tops \$35 per kg, dark fawn yarn \$12 per 100 g. 'Altair', MOUNT OLIVE 2330. Ph: 02-6577-3220.

VALKYRIE ESOTERIC SUPPLIES, hundreds of pagan/new age products, jewellery, health & majickal herbs, crystals, incense etc. Also raw materials incl essential oils, waxes, bases etc. For mail-order catalogue please send \$2 to: Valkyries, PO Box 367, LEONARA, WA 6438.

CALENDAR EVENTS

BAMBOO EXPO/WORKSHOP, Bellingen, September. Anyone interested contact: donnedoo58@hotmail.com or Ph: 02-6655-8557.

MANGROVE MOUNTAIN & DISTRICT COUNTRY FAIR, Saturday 21 October 2000. Continuous entertainment, many stalls, displays, rides for the children & a hall full of prize winning exhibits incl photography, farm produce, cakes, patchwork, needlework, woodwork, art, flowers & much more. All proceeds distributed among local community groups. Eng: 02-4376-1350, or 02-4377-1566.

COMMUNITIES CONFERENCE 2000 & The Blooming Arts Festival, 22 - 26 November 2000, Crystal Waters Permaculture Village, Queensland, Australia. Keynote speakers & workshop facilitators: Peter Harper, Jill Jordan, Max Lindegger, Rob Doolan, Simon Clough, Ed McKinnley, Robina McCurdy, Robin Clayfield, Morag Gamble, Barb Knudsen + more. For enq contact: 37 Crystal Waters, MS16, MALENY, Qld 4552. Ph: 07-5494-4887, or ph/fax: 07-5494-4833.

HANDMADE HOUSES TOUR, beautiful Bellingen area. Stone, wood, sandstone block, mud, sawdust packing, pole, solar power, recycled materials. Owners on site for discussion. Great oppo for potential owner builders. Fund-raiser for Tallwood Community School Inc, 23 & 24 September. For enq ph: 02-6564-7619, 02-6564-4003, 02-6564-7908.

ECO PRODUCTS

E-CO SHOWER, Australian Innovative Water Saving Systems. <http://connect.to/ecoshower>, eco@australiainmail.com Ph: 02-4975-1141.

CONTACTS

NEW SOUTH WALES

I'M SEEKING A DOWN-TO-EARTH slimish single female, or mum with 1 child, who genuinely seeks a partner, a happy family home, a fresh start to life, wants to relocate, has emotional baggage in perspective, & has no problem travelling here for a visit. Write to: BS, 79 Yarragee Rd, MORUYA 2537, or ph: 02-4474-5075. I'm a full-time single dad, 35, youthful, 6 ft, fair, 90 kg, one 12 yr old daughter. Travelled a lot. Now living a peaceful country lifestyle away from the fast lane. I own 3 ac near river/ocean. Cosy wood cottage. Honest, romantic, communicative, optimistic, humorous, playful, compassionate. Handyman, cook, arts/crafts, outdoors, beach, etc, garden, vegies, chooks, 1 cat. Light smoking/drinking OK. (Not into pubs, footy, crowds or religions.) Exchange of photos appreciated.

IRREVERENT AUSTRALOPITHECINE 48 yr old male, respects character not looks, seeks lady friend - small size, soh, unconventional, anti-establishment & who loves the great outdoors, possibly interested in conservation or the arts. 'BUSHY' (GR140), PO Box 117, SEYMOUR 3661.

PRETTY, PETITE GENTLE FEMALE seeks honest male as companion & soul mate, age prefer 45 - 65. Reply Angel (GR140), C/- PO Box 117, SEYMOUR 3661.

COURSES

QUEENSLAND

VEGETARIAN MALE, 47 years, intelligent, slim & health conscious, n/s, n/d, naturally affectionate & caring. I enjoy the outdoors, gardening, cooking, & most of all, taking care of someone I love. Seeking a sincere caring woman (25 to 45), or mother & child, to share simple country lifestyle, Wayne Pollard, PO Box 235, GIN GIN, Qld 4671. Ph: 07-4157-2736.

FEMALE, SIXTY, QUIET, likes classical music, animals, rural lifestyle. Would like to meet people for company, outings etc. All replies answered. Mari (GR140), C/- PO Box 117, SEYMOUR 3661.

VICTORIA

JOHN, THIRTY-SEVEN, tall, slim, south-western Victoria. Interests: Buddhist philosophies, organics, writing, art, reading, bushwalking, mountain bike riding. Seeks woman similar interests, age open, John (GR140), C/- PO Box 117, SEYMOUR 3661.

KIND-HEARTED BUSH GIRL, happy & healthy, 32 yr old student, interested in alternative therapies, loves open spaces, music, sailing, good food, laughter, & travelling Australia. Seeking same kind-hearted bush boy to share the adventure. Reply to: BG (GR140), C/- PO Box 117, SEYMOUR 3661.

TASMANIA

MALE, MIDDLE AGE, European, n/s, s/d, living rural lifestyle, 3 mins from town, 10 mins from beach. Seeks honest female 40 - 50 yrs for r/ship. Reply: Richard (GR140), C/- PO Box 117, SEYMOUR 3661, or Ph: 03-6372-2528.

ACT

SINGLE PART-TIME DAD, capable owner/builder, IT career, into coast, music, bbqs & movies. 185 cm, 37, OK looks & great with kids. Ready to buy/build in Canberra district solar/earthen dream house & permaculture garden. Seeking friend/partner with capable mind & heart. 'Merlin', C/- PO Box 196A, LYNEHAM, ACT 2602.

AUSTRALIA-WIDE

TRAVELLING, SECURE, GENTLEMAN, no addictions, 45+, handsome, romantic, w/spoken, cultured, 6' tall, nd/hair; FGS/body. Spiritual, u/interexperience/'everything+'. Seeks beautiful, natural lady, age open, personality & lovely nature, interesting; accommodation anywhere, genuine, meet you. Please write: 'Clive', PO Box 1693, GEELONG Vic 3220.

TALL GERMAN WOMAN, independent, intelligent and well educated would like to meet an Aust farmer who likes to have an equal partner at his side with passion for nature and farm living. View perm r/ship. Only serious messages to email: ha_ba47@hotmail.com

GRASSIFIEDS

DEADLINES: GR141 - AUG 30TH
GR142 - OCTOBER 30TH

LATE GRASSIFIEDS

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KYMBO'S PERMACULTURE FARM (Murrayville), 30 ac, on the edge of the village. Excellent water, Mediterranean climate, own bore. Basic 2 b/r house, granny flat & 2 sheds. Design established, incl: woodlot, olive spiral, 200 pistachios, 2 ac living haystack, 150 vine vineyard, 70 table grape vines. Food forest, fully planted windbreaks, 5 small paddocks to suit olives, market garden, herbs etc & more. A rare opportunity! Ph: Kym or Kylie, 03-5045-2199. \$120,000 ONO. Any genuine offer considered!

FEMALE, THIRTY-ONE, SEEKS friend of the earth, community-minded male for friendship/dates, n/s. PO Box 226, WARBURTON 3799.

WANTED IN QUEENSLAND - Maryborough or Gympie area - under 10 km from town with town water supply. Small acreage in a quiet area. Will buy in as part owners or buy in own right. Ph: Peter or Rhonda, 07-3266-3202.

MALE, FIFTY-FOUR, SEEKS FEMININE soul mate to share the redirection, freedom & vitality that midlife can bring. Kama Tanha (GR140), C/- PO Box 117, SEYMOUR 3661.

NSW - SOUTH QUEENSLAND, 60 yr old man, previously city worker now 3 yrs as grey nomad, average build, financially OK. Seeks loving woman to share future. I am willing to try yours or alternative lifestyle. Your details get mine. ALA. Mr K Monahan, Landbase Australia, Locked Bag 25, GOSFORD 2250.

HAPPY FEMALE, 30s, into adventure & honest living. Love travel, children, music, reading & making things with my hands (however badly!). Currently living in the bush, have delicious experiences to share with an interesting, fun man. Grab your swag, the stars are calling. Reply: Lily (GR140), C/- PO Box 117, SEYMOUR 3661.

HEALING CO-OP, Crescent Head, 15 motel-like units, restaurant, camping area with facilities and backpackers dormitory. Looking for shareholders, \$3000 per share. Ph: Robyn 02-6563-1671.

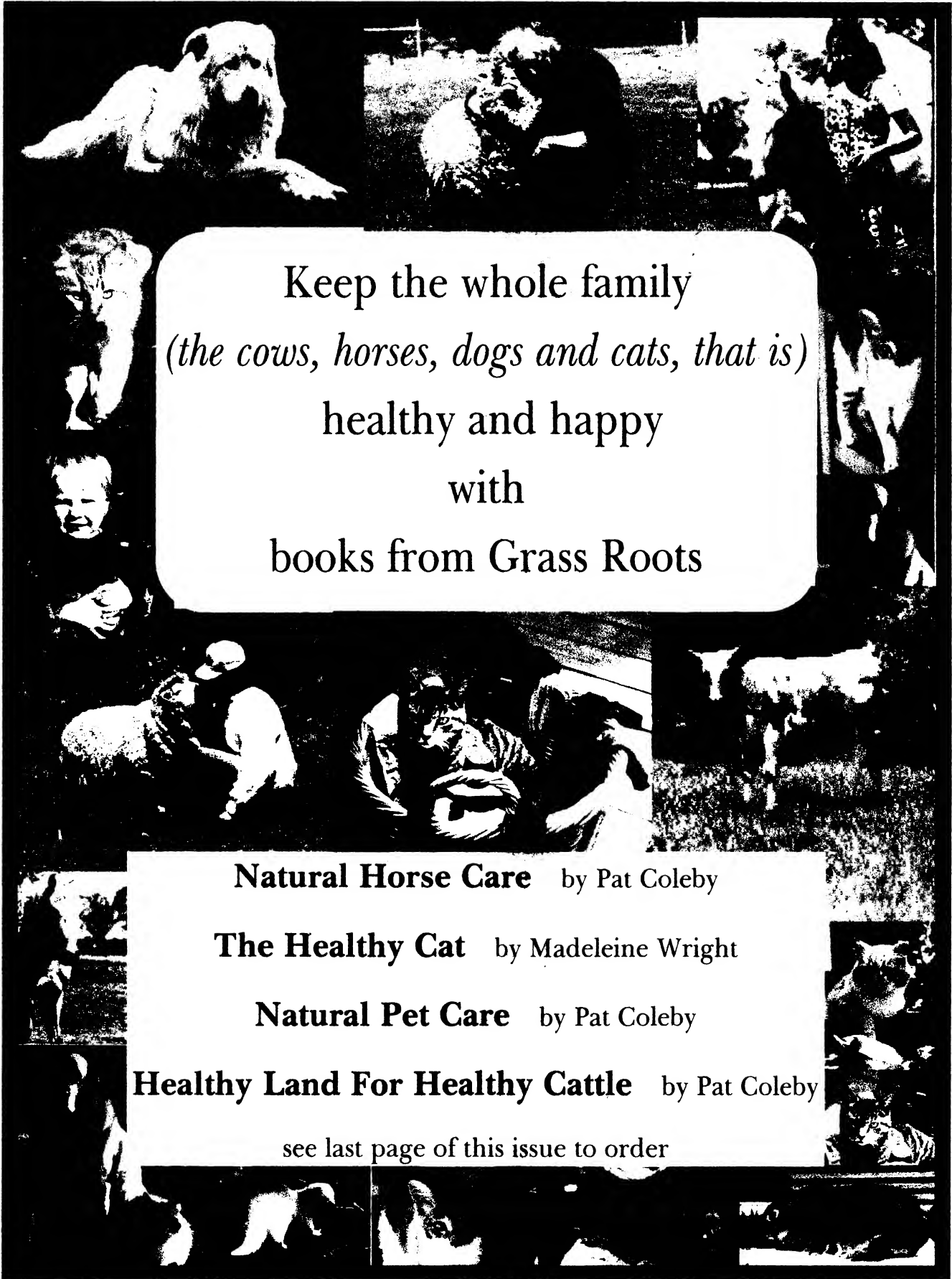
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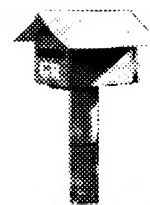
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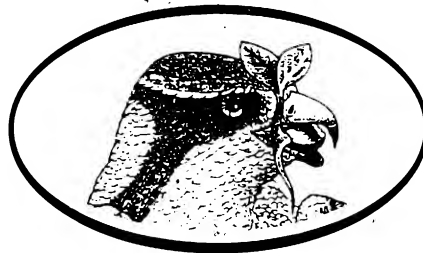
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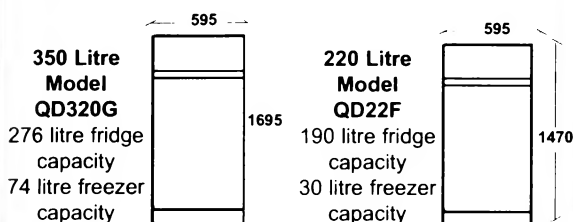
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